SAMSUNG

# VIDEO CASSETTE REDORDER

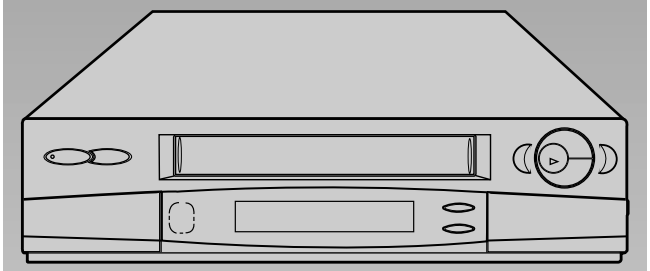
**SV-A20G/SVR-200**
**SV-A30G**
**SV-A40G/SVR-205**
**SV-A60G/SVR-400**
**SV-A80G/SVR-405**

VHS
PAL

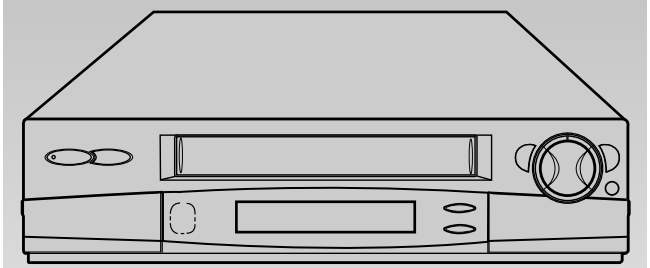
# SERVICE Manual

For mechanical disassembly and adjustment, refer to the "Mechanical Manual" (DX7-R/RC, DX8-R/RC ⟶ AC68-20316A).

## VIDEO CASSETTE RECORDER



**SV-A20G/SVR-200/SV-A30G/SV-A60G/SVR-400**



**SV-A40G/SVR-205/SV-A80G/SVR-405**

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AC68-20345A

# 1. Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.

2. When reinstalling the chassis and its assemblies, be sure to restore all pretective devices, including : control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children --might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

   If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (See Fig. 1) :
   Warning : Do not use an isolation transformer during this test. Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances*), and Underwriters Laboratories (*UL Publication UL1410, 59.7*).

5. With the unit completely reassembled, plug the AC line cord directly the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known erath ground (metal water pipe, conduit, etc.) and all exposed metal parts, including : antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

6. X-ray Limits :
   The picture tube is designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original.

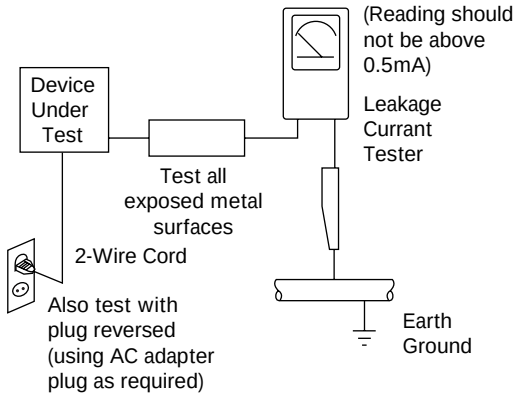

(Reading should not be above 0.5mA)
Device Under Test
Leakage Currant Tester
Test all exposed metal surfaces
2-Wire Cord
Also test with plug reversed (using AC adapter plug as required)
Earth Ground

Fig. 1-1 AC Leakage Test

7. Antenna Cold Check :
   With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong.
   Connect the other lead to the coaxial connector.

8. High Voltage Limit :
   High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits.

   Heed the high voltage limits. These include the *X-ray protection Specifications Label*, and the *Product Safety and X-ray Warning Note* on the service data schematic.

9. Some semiconductor ("solid state") devices are easily damaged by static electricity.
   Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

10. Immediately before handling sny semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging Wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

11. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.

12. Design Alteration Warning :
    Never alter or add to the mechanical or electrical design of this unit. Example : Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

13. Hot Chassis Warning :
    Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

    To confirm that the AC power plug is inserted correctly, do the following : Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.

14. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, *regardless of the AC plug polarity*. These units can be safely serviced *only* if an isolation transformer inserted between the receiver and the power source.

15. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

16. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.

17. Observe the original lead dress, especially near the following areas : Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.

18. Picture Tube Implosion Warning :
    The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.

19. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.

20. Product Safety Notice :
    Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

    Components that are critical for safety are indicated in the circuit diagram by shading, ( or ).
    Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

# 2. Reference Information

## 2-1 Servicing Jigs and Special Tools

### 2-1-1 Servicing guide

1. For this VCR chassis, the program switch and the sensors (start/end/reel) are located on the main PCB, not on the deck ass'y.

2. As long as the deck ass'y is connected to the main PCB, all repairs are possible.
   Important : In order to repair the main PCB without the deck ass'y connected, the X-5 chassis jig should be used.

3. To emulate the function of the sensors, connect a jumper or solder land (two point) at service option(W750) on the function-timer PCB.

4. The X-5 chassis jig can be used for the following :

1) When repairing or confirming the operation of the deck ass'y.
2) When replacing or repairing the components located under the deck ass'y.
3) When repairing the function PCB.

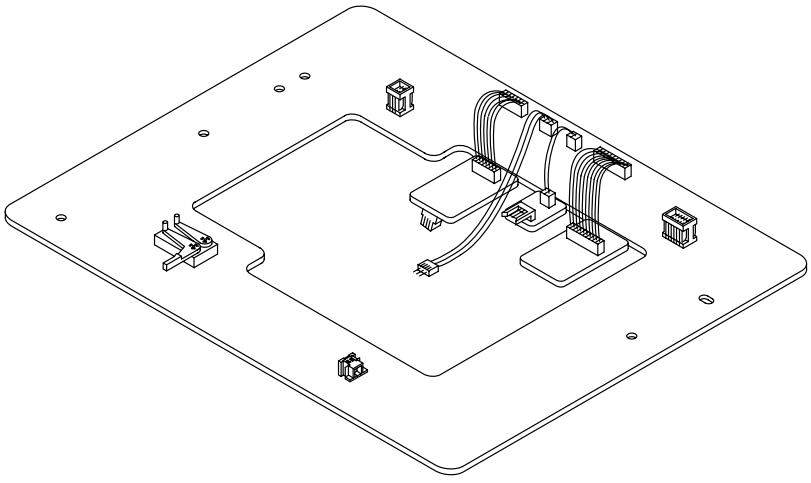
5. The X-5 chassis jig can not be used for the following :

1) Repairing defects in the video section.
2) Repairing defects in the audio section.
3) If the defect is related to tape speed.

**Note :**
1) Repair may not be possible if there is external noise between the deck ass'y and main PCB.
2) If tape control signal is not connected to the jig, the VCR must be operated in SP mode.

### 2-1-2 Servicing Jig

| Jig Item | Part No. | Use |
|---|---|---|
| X-5 Chassis Jig | 68140-500-013 | Connects the deck ass'y to the main PCB connecting cable. |



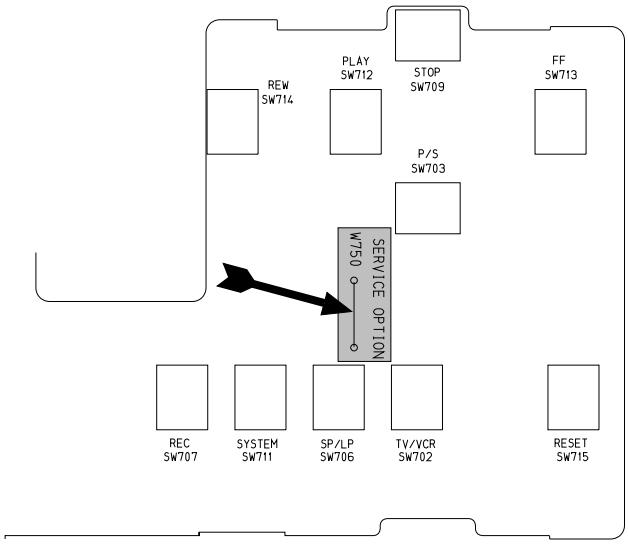
## 2-1-4 How to Connect X-5 chassis jig

1. Unplug the power cord from AC outlet.

2. Remove the deck ass'y from main PCB (See Page 4-5 of service manual).

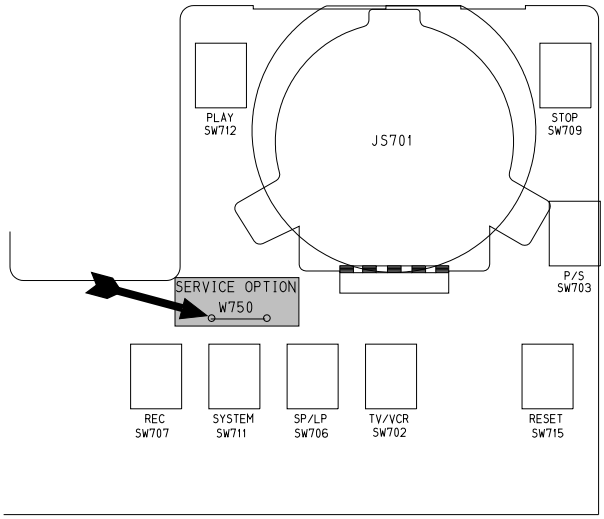
3. To emulate the function of the sensors, place a jumper or solder land (two point) at service option(W750) on the function-timer PCB. (see diagram below).

**SV-A20G/SVR-200**
**SV-A30G**
**SV-A60G/SVR-400**




Function-Timer (Component side)

**SV-A40G/SVR-205**
**SV-A80G/SVR-405**




Function-Timer (Component side)

**Note** : After completing repairs, SW715 on the function PCB in order to reset.

4. Insert wafers of drum motor, capstan motor and loading motor on X-5 chassis jig into each of the connectors of deck ass'y, and then secure with three screws.

5. Solder the 3 leads of the jig cable to "CN605" on the main PCB.

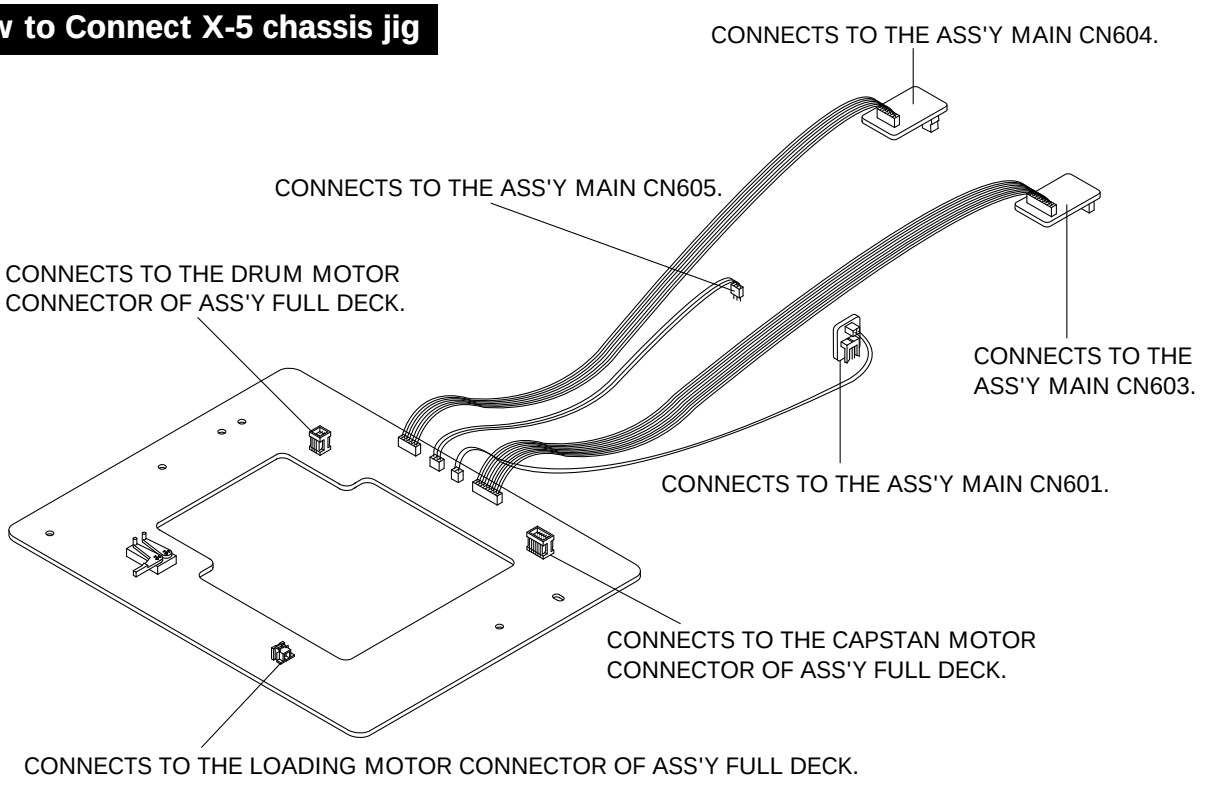
6. Apply power to the function PCB.

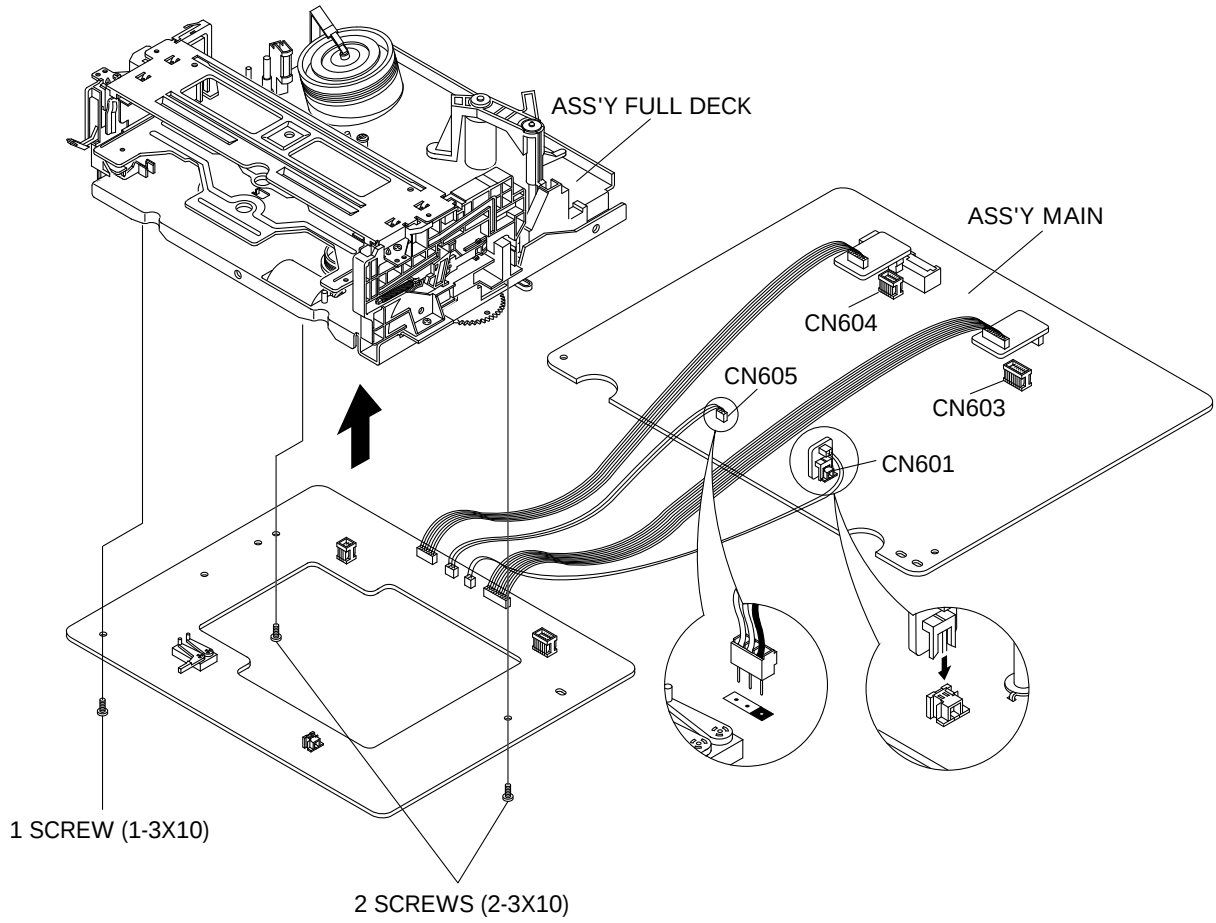
7. Insert a test tape into the housing ass'y.

8. Simultaneously touch the start and end sensor LEDs on the PCB, so that the tape loads automatically. After the tape is loaded, all of the function buttons on the function PCB can be used.

9. If the test tape is ejected while the jig is in use, attempt to re-load the tape by simultaneously touching the start and end sensor LEDs. If the tape still does not load, reset the function PCB by pressing SW715.

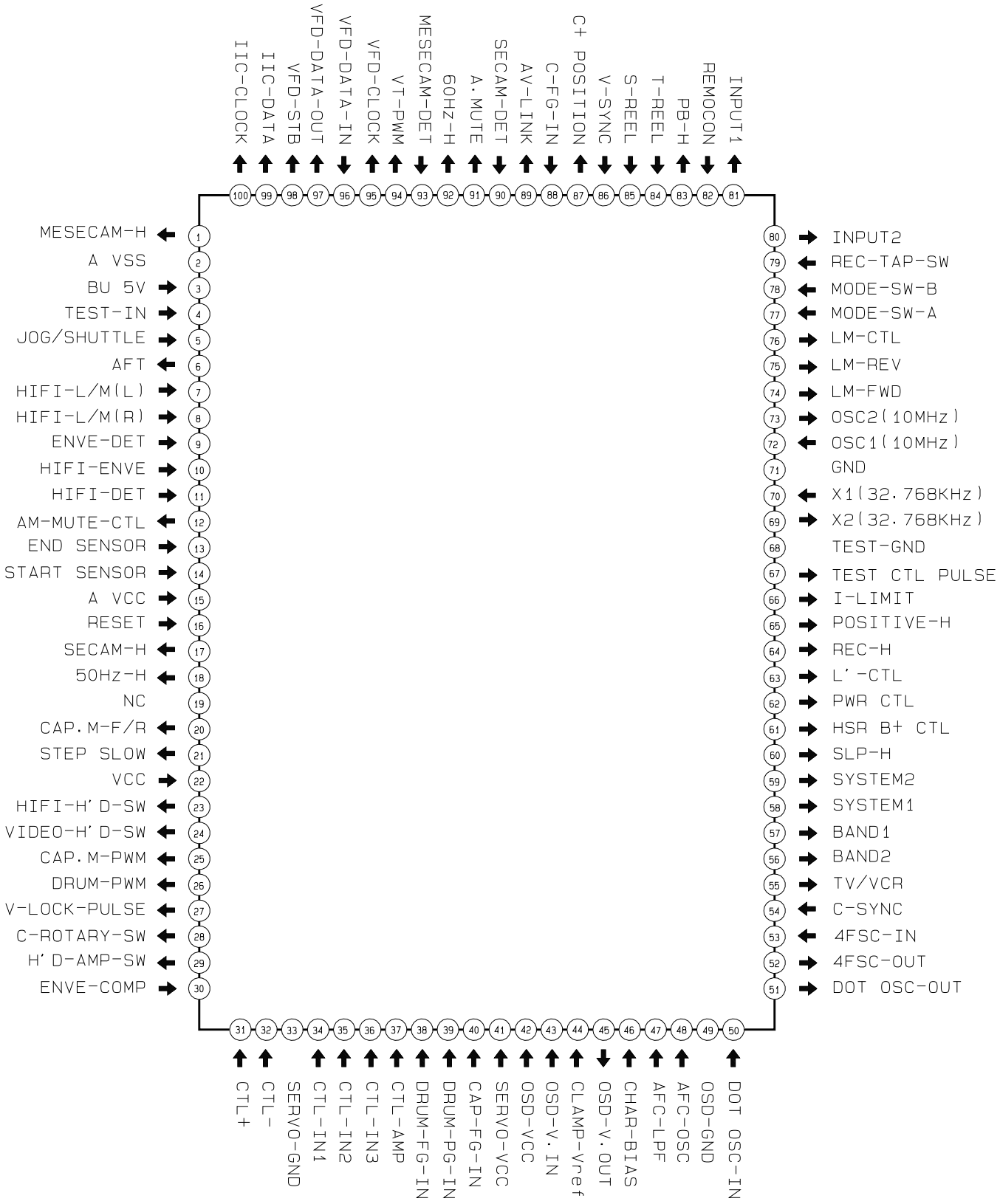
## How to Connect X-5 chassis jig


CONNECTS TO THE ASS'Y MAIN CN604.
CONNECTS TO THE ASS'Y MAIN CN605.
CONNECTS TO THE DRUM MOTOR CONNECTOR OF ASS'Y FULL DECK.
CONNECTS TO THE ASS'Y MAIN CN603.
CONNECTS TO THE ASS'Y MAIN CN601.
CONNECTS TO THE CAPSTAN MOTOR CONNECTOR OF ASS'Y FULL DECK.
CONNECTS TO THE LOADING MOTOR CONNECTOR OF ASS'Y FULL DECK.

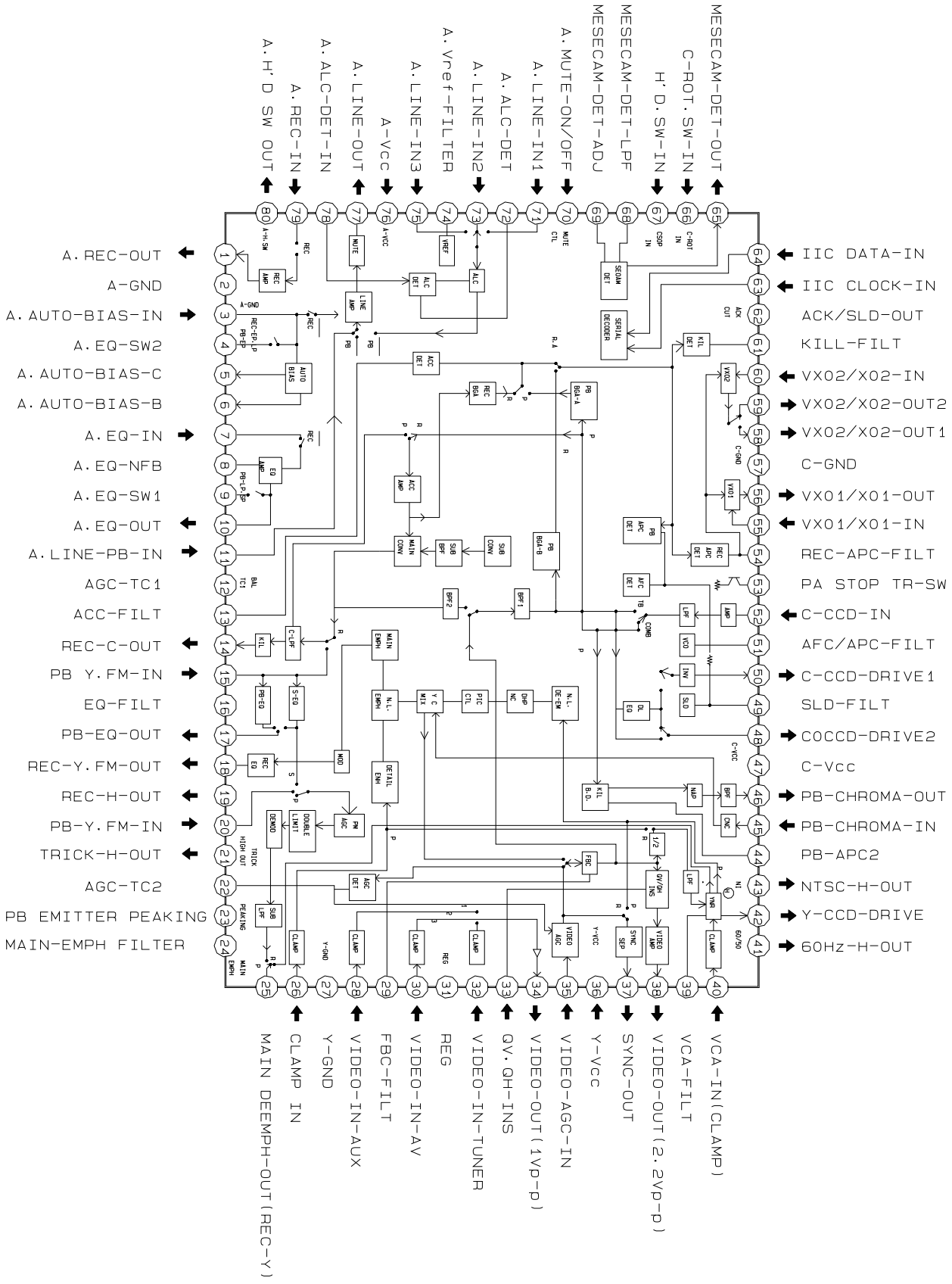


# 2-2 IC BLOCK

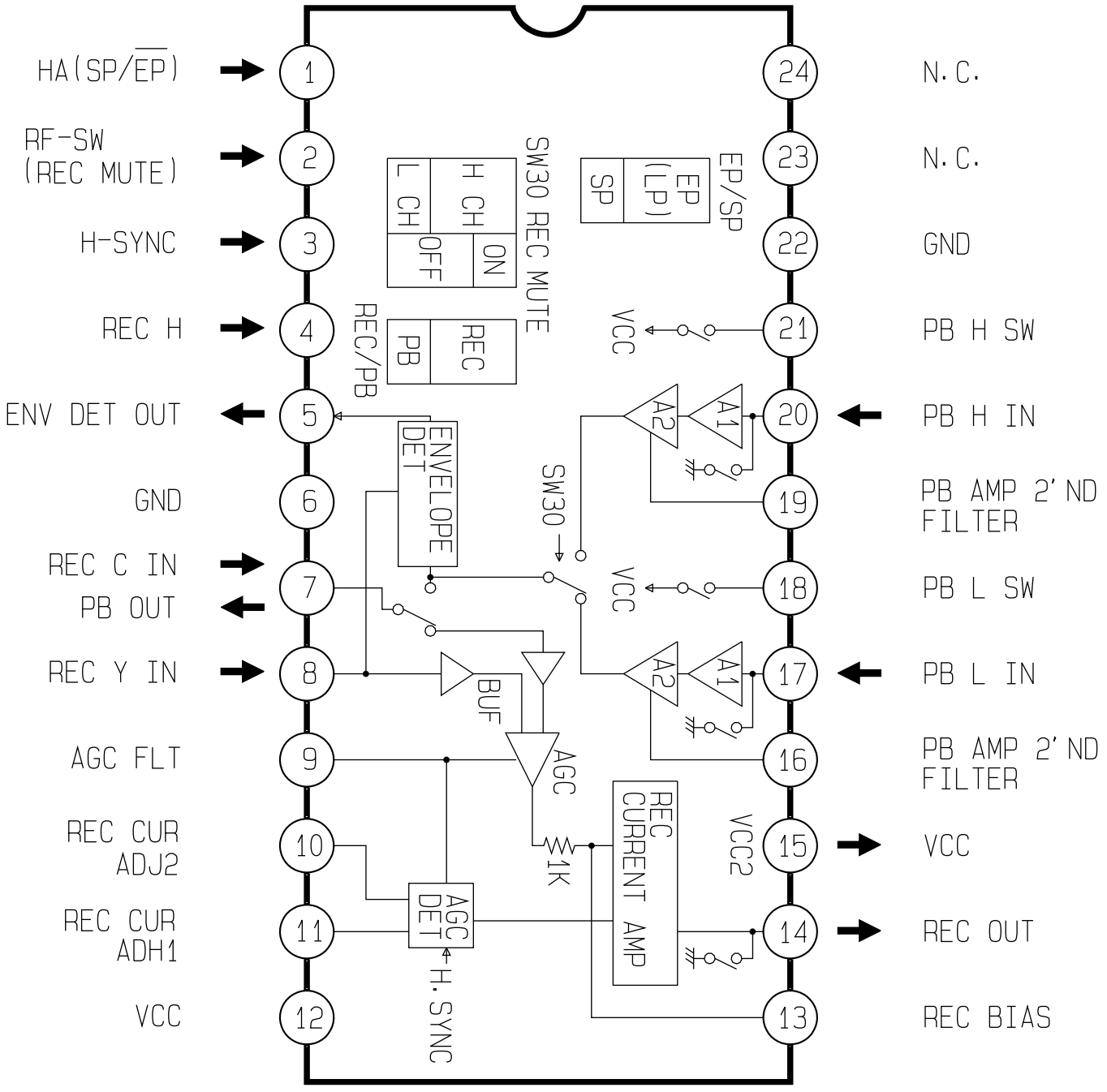
## 2-2-1 IC601 (HD6473977)



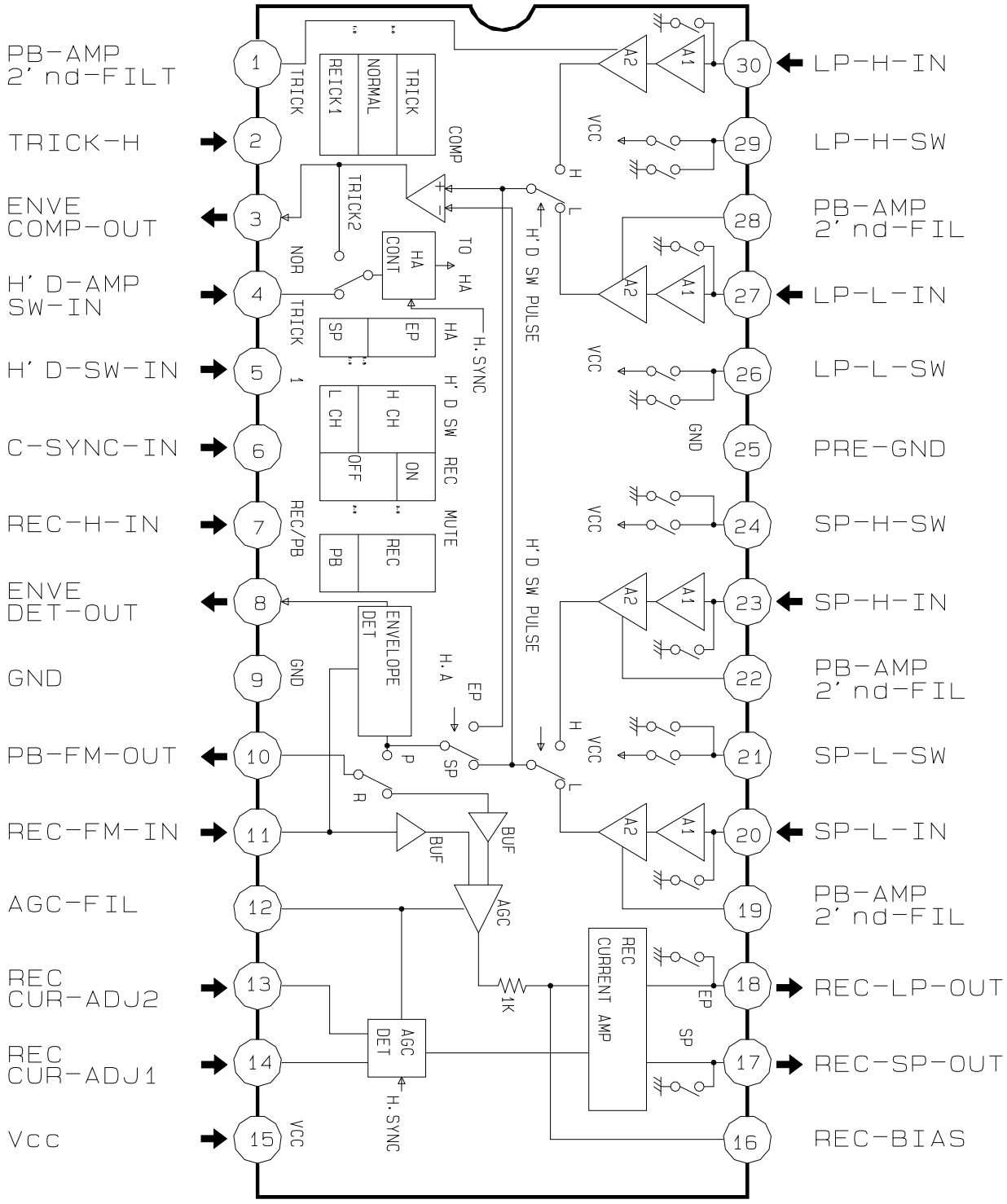
## 2-2-2 IC301 (SS11501M/SS11511M)



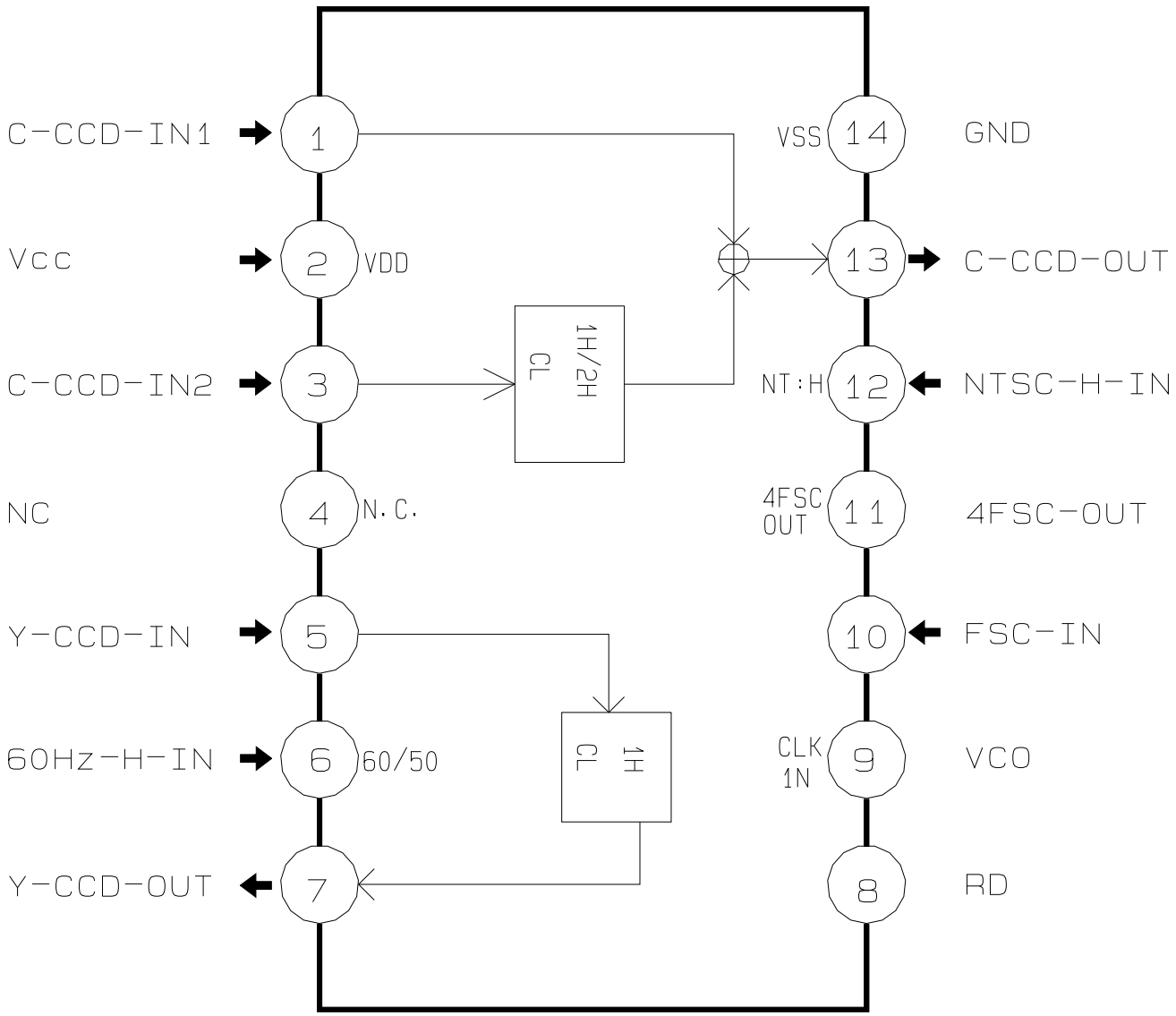
### 2-2-3 IC302 (LA7411)



## 2-2-4 IC302 (LA7416)



## 2-2-5 IC303 (SS23478MSS23377M)



# 3. Product Specifications and Comparison Chart

## 3-1 Product Specifications

Design and specifications are subject to change without notice.

| Operation | Description |
|---|---|
| Format | VHS PAL/SECAM standard |
| Heads | Video : SV-A20G/A30G/A40G/SVR-200/205 : 2 rotary heads<br>SV-A60G/A80G/SVR-400/405 : 4 rotary heads<br>Audio/Control : 1 stationary head, Erase : 1 full track erase head |
| Receiving channel | VHF-I, VHF-III, UHF, Interband/Hyperband |
| Television system | STANDARD D/K, B/G |
| Luminance | FM azimuth recording |
| Colour system | PAL/MESECAM : Down converted subcarrier phase shifted direct recording<br>NTSC PB on PAL TV |
| Tape speed | SP : 23.39 mm/sec<br>LP : 11.69 mm/sec |
| Recording/playback time | SP : 3 hours (E-180 Tape)<br>LP : 6 hours (E-180 Tape) |
| F.F/REW time | About 100-190 sec in REW/F.F with E-180 |
| VIDEO | |
| Input<br>Output<br>Signal-to-noise ratio<br>Horizontal resolution | 0.5 to 2.0 Vp-p : 75 ohm unbalanced<br>1.0 ± 0.2 Vp-p : 75 ohm unbalanced<br>Better than 43 dB (SP)<br>More than 240 lines (SP) |
| Audio | |
| Input<br>Output<br>Wow and flutter (WTD)<br>Signal-to-noise ratio<br>Frequency response | -8 dBm, 47 Kohm unbalanced<br>-8 ± 3 dBm, 1 Kohm unbalanced<br>0.4% max (SP)<br>42 dB min (IHF A filter)<br>20Hz-20KHz |
| Power requirement | 100~240V (AC 50/60 Hz) |
| Power consumption | Approx. 18 watts |
| Operation temperature | 41°F-104°F (5°C-40°C) |
| Operation humidity | 10%-75% |
| Weight | 4.4 Kg (net) |
| Dimensions (W x H x D) | 380 x 90.5 x 310 mm |

## 3-2 Comparison Chart

| FUNCTION / MODEL | HEADS | SPEED | FRONT A/V | AUDIO DUB. | SHUTTLE | MULTI SOUND 2 | SIMULCAST |
|---|---|---|---|---|---|---|---|
| SV-A20G/CIS(SVR-200) | 2 HEADS | SP | O | O | X | X | O |
| SV-A30G/TSE | 2 HEADS | SP | X | X | X | O | X |
| SV-A30G/ZAMA | 2 HEADS | SP | X | X | X | O | X |
| SV-A40G/CIS(SVR-205) | 2 HEADS | SP | O | O | O | X | O |
| SV-A40G/TSE | 2 HEADS | SP | O | O | O | O | O |
| SV-A40G/ZAMA | 2HEADS | SP | O | O | O | O | O |
| SV-A60G/CIS(SVR-400) | 4 HEADS | SP/LP | O | O | X | X | O |
| SV-A80G/CIS(SVR-405) | 4 HEADS | SP/LP | O | O | O | X | O |
| SV-A80G/TSE | 4 HEADS | SP/LP | O | O | O | O | O |
| SV-A80G/ZAMA | 4 HEADS | SP/LP | O | O | O | O | O |

# 4. Disassembly and Reassembly

## 4-1 Cabinet Assembly

**Note :** Disassemble in the order shown.
Reassemble in reverse order.

### 4-1-1 Cabinet Top removal

1. Remove 5 screws and slide the top cabinet to the rear to remove.

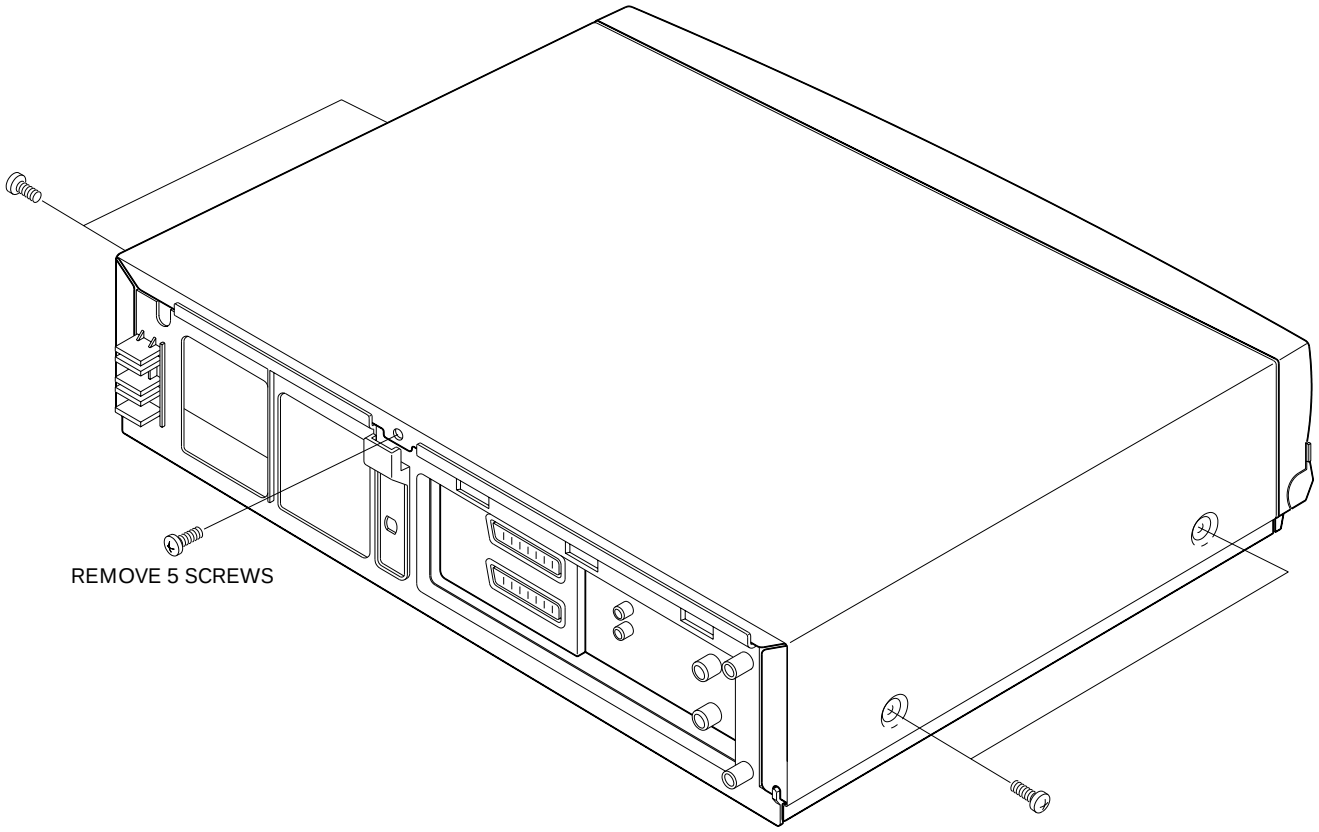
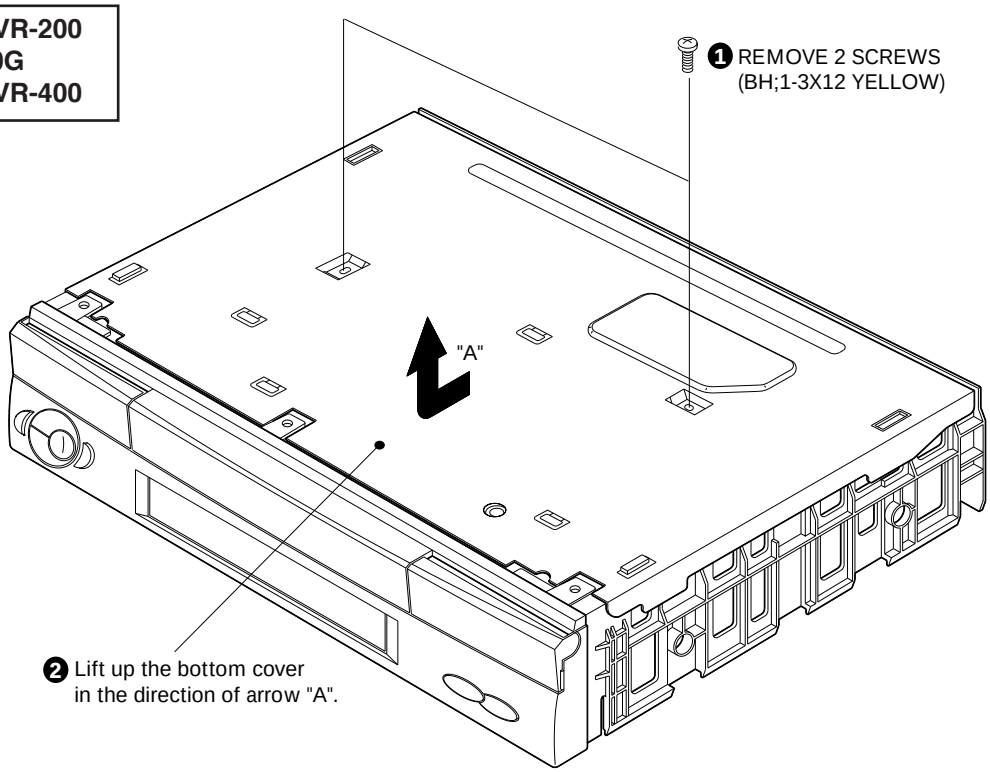



Fig. 4-1 Cabinet Top removal

## 4-1-2 Bottom cover removal

1. Remove 2 screws.
2. Lift up the bottom cover toward arrow "A".

**SV-A20G/SVR-200**
**SV-A30G**
**SV-A60G/SVR-400**




**SV-A40G/SVR-205**
**SV-A80G/SVR-405**

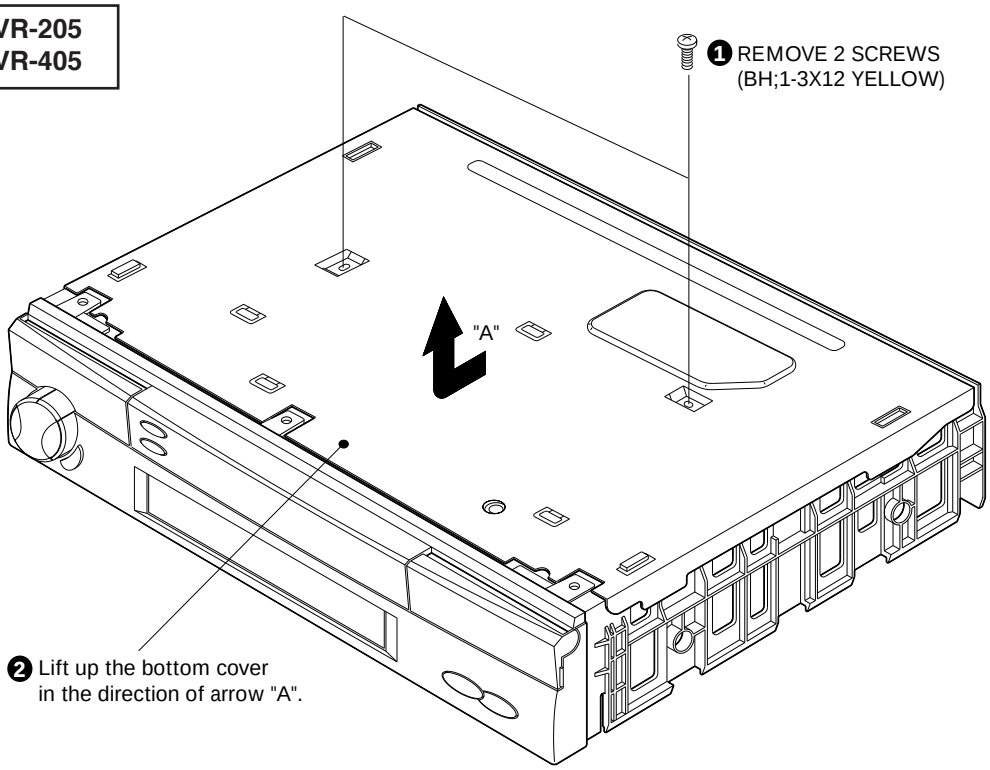
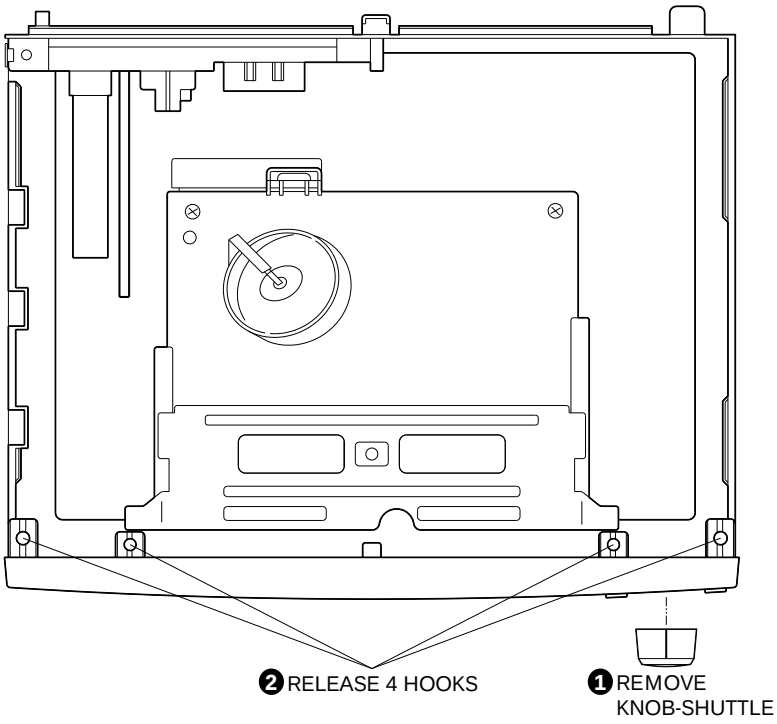


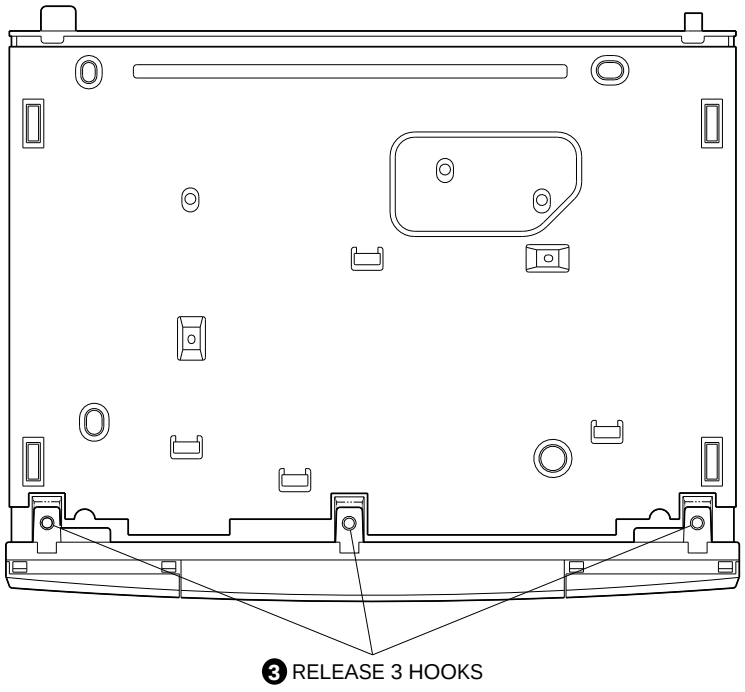

Fig. 4-2 Bottom Cover removal

### 4-1-3 Ass'y Front Panel removal

1. Remove the knob-shuttle.
2. Release 4 hooks on the top side and 3 hooks on the bottom side and then, pull the ass'y front panel to remove.




(Top view)




(Bottom view)

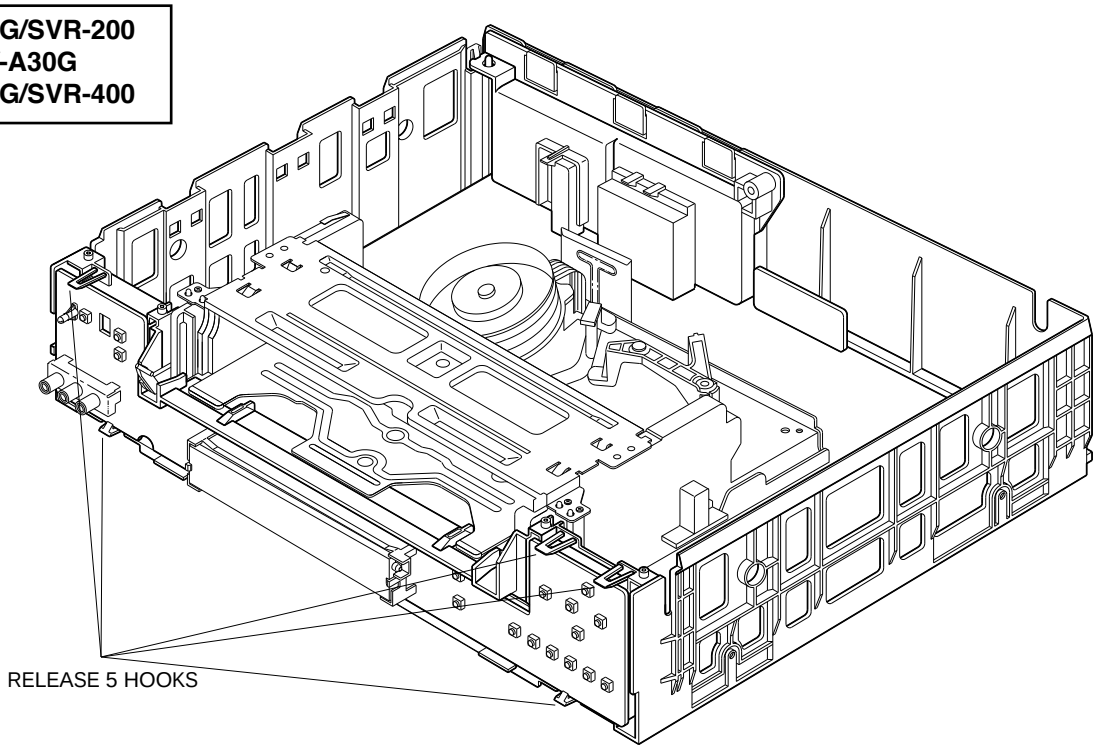
Fig. 4-3 Ass'y Front Panel removal

## 4-1-4 Ass'y Function-Timer removal

1. Release 5 hooks and remove the ass'y function-timder.

**Note :** Take extreme care not to damage the PCB when removing it.

**SV-A20G/SVR-200**
**SV-A30G**
**SV-A60G/SVR-400**




**SV-A40G/SVR-205**
**SV-A80G/SVR-405**

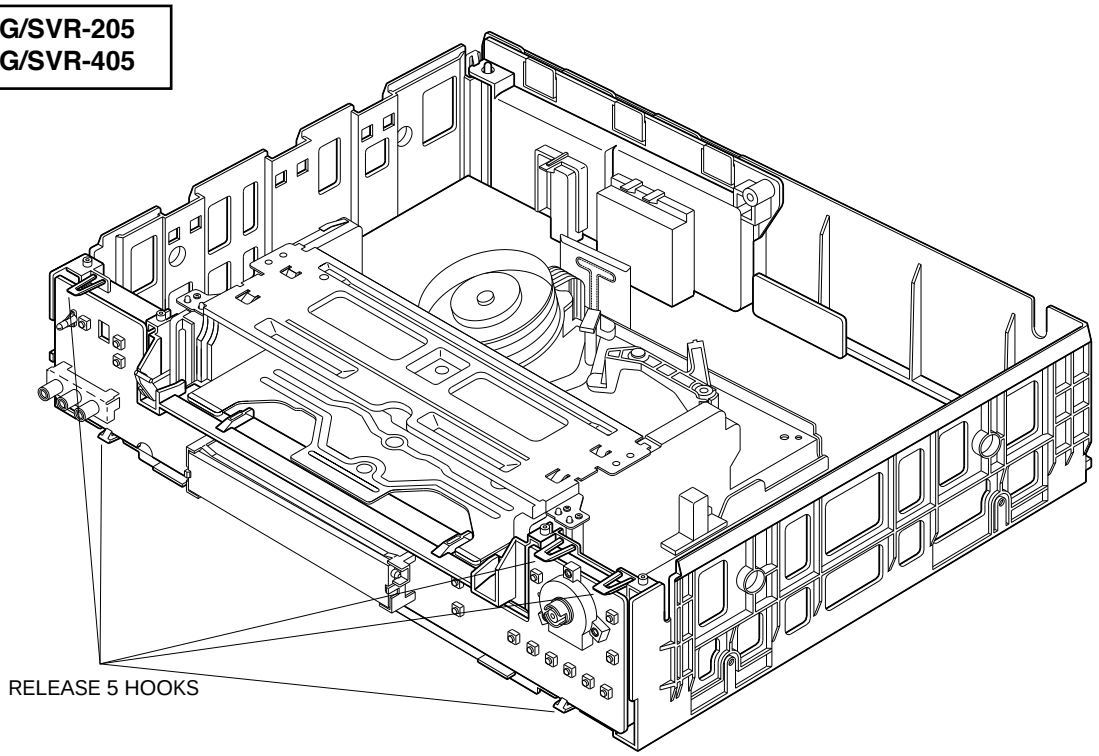



Fig. 4-4 Ass'y Function-Timer removal

## 4-1-5 Chassis removal

1. Remove 2 screws holding the bottom cover.
2. Remove 2 screws holding the frame.
3. Remove 2 screws holding the housing ass'y.
4. Remove 2 screws holding the ass'y full deck.
5. Lift the ass'y full deck up.
6. Release 1 tab holding the connector board ass'y.
7. Release 1 hook holding the ass'y main.
8. Lift the ass'y main up to remove.

**Note :** 1. When removing chassis, take extreme care not to damage the main PCB front.
2. When reinstalling the deck on the main PCB, take extreme care not to damage the sensor.

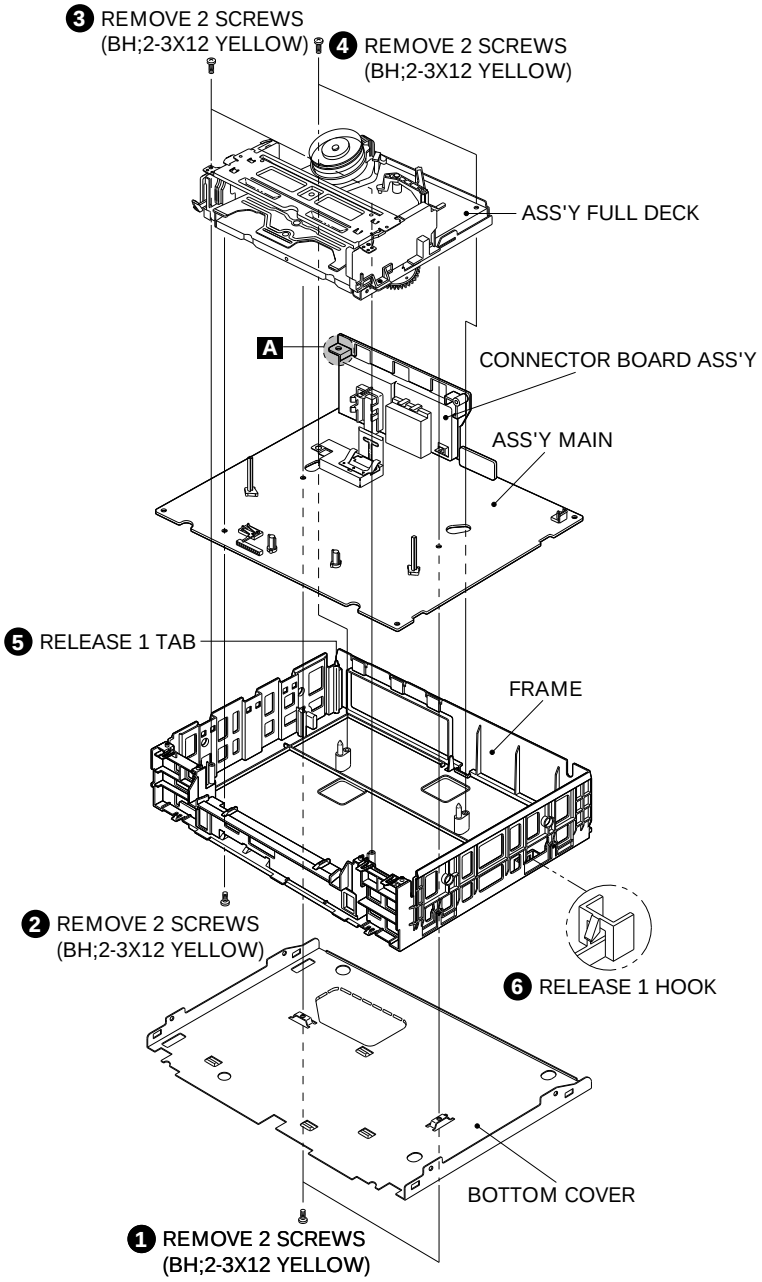



Fig. 4-5 Chassis Removal

## 4-2 Circuit Board Locations

**SV-A20G/SVR-200**
**SV-A30G**
**SV-A60G/SVR-400**

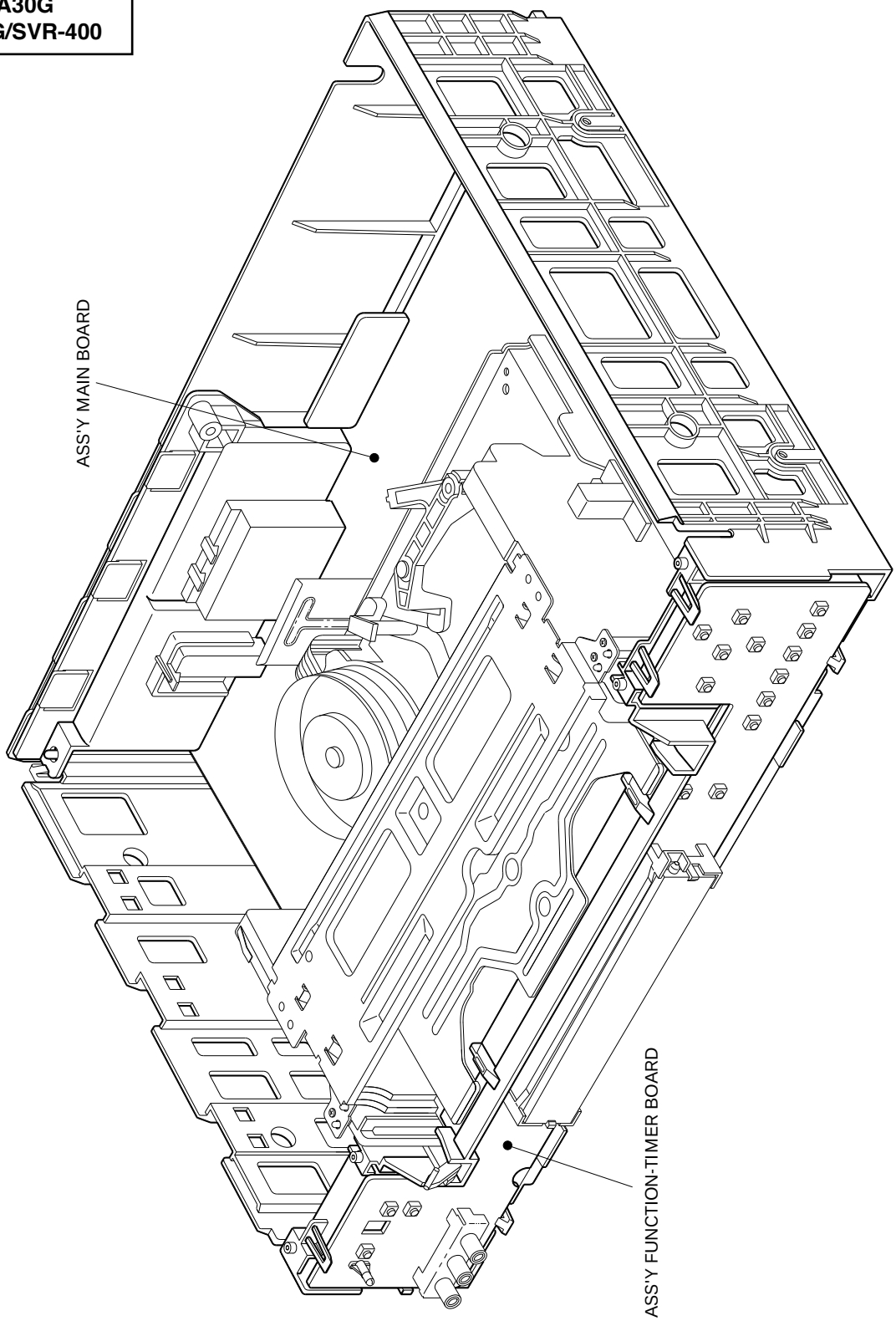



Fig. 4-6 Circuit Board Locations

**SV-A40G/SVR-205**
**SV-A80G/SVR-405**

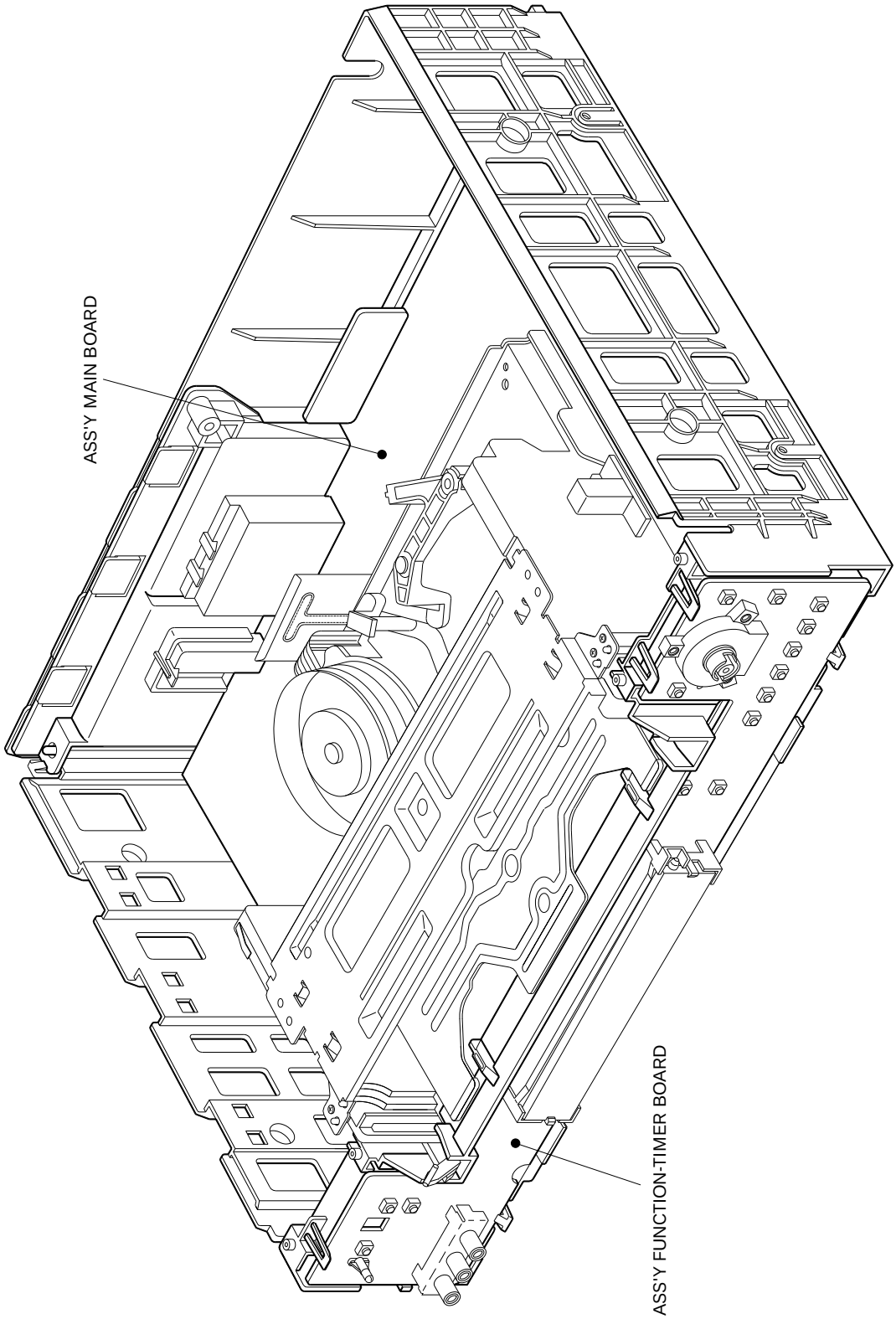



Fig. 4-6 Circuit Board Locations

# MEMO

# 5. Alignment and Adjustment

**Note :** After replacing the ass'y full deck, the ass'y main, the cylinder ass'y and the micom(IC601), the remote control ass'y can be used to adjust the "X-point (tracking center) adjustment" and "Head S/W point" adjustment.

## 5-1 Reference

### 5-1-1 The type of remote control ass'y

1. Remote control ass'y (AC93-10039Y/69099-633-252) is specified as a service jig in the service manual of X-5/X-6(DX5-R/DX5-RC/DX6-R/DX6-RC) chassis. (See Fig. 5-1)
2. Normal remote control ass'y for X-7/X-8 (DX7-R/DX7-RC/DX8-R/DX8-RC) chassis. (See Fig. 5-2)

### 5-1-2 How to identify between normal remote control ass'y and multi remote control ass'y for X-7/X-8 chassis (See Fig. 5-2)

1. The color of some buttons related to TV function are gold.
2. Audio button is added instead of the test button hidden behind of inlay.
3. The positions of some buttons are different.

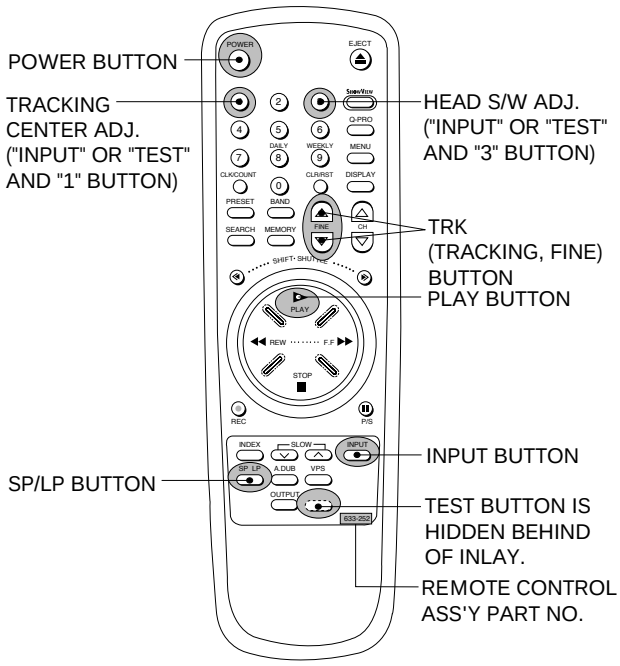

POWER BUTTON
TRACKING CENTER ADJ. ("INPUT" OR "TEST" AND "1" BUTTON)
HEAD S/W ADJ. ("INPUT" OR "TEST" AND "3" BUTTON)
TRK (TRACKING, FINE) BUTTON
PLAY BUTTON
INPUT BUTTON
SP/LP BUTTON
TEST BUTTON IS HIDDEN BEHIND OF INLAY.
REMOTE CONTROL ASS'Y PART NO.

Fig. 5-1 Remote Control Ass'y Jig for X-5/X-6 Chassis (AC93-10039Y/69099-633-252)

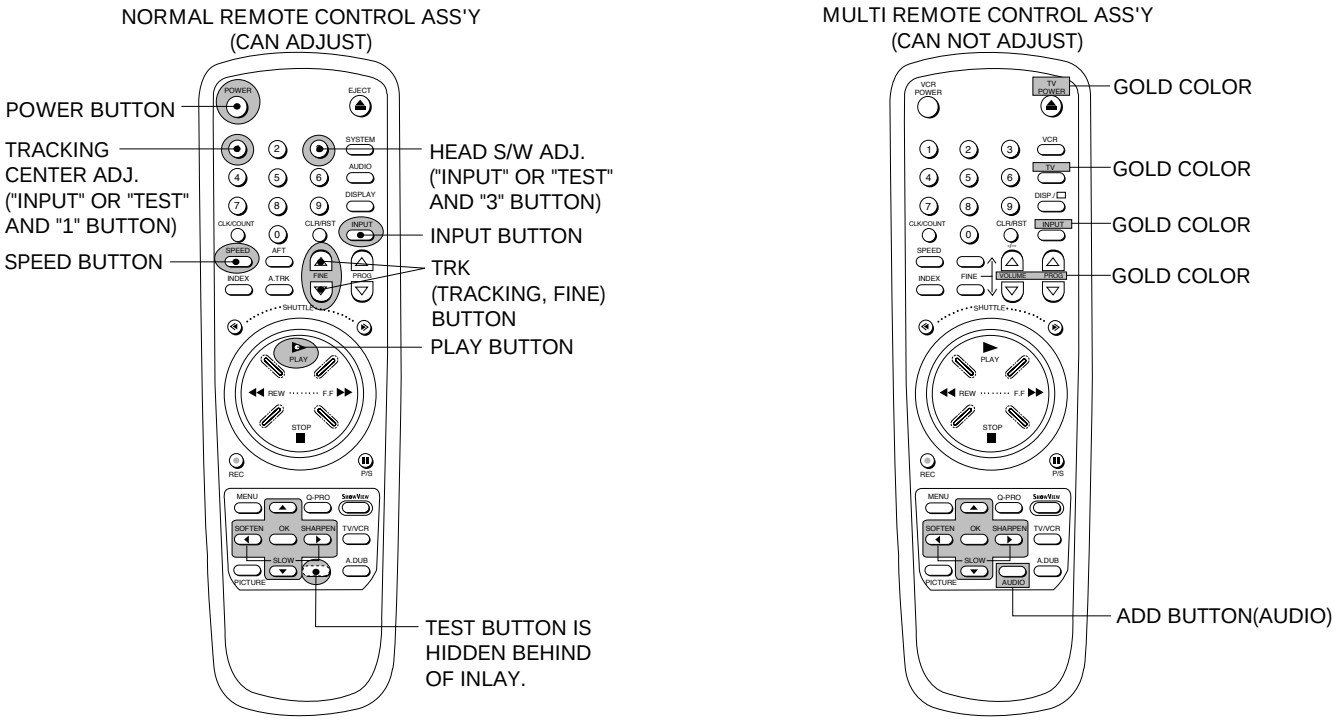

NORMAL REMOTE CONTROL ASS'Y (CAN ADJUST)
POWER BUTTON
TRACKING CENTER ADJ. ("INPUT" OR "TEST" AND "1" BUTTON)
SPEED BUTTON
HEAD S/W ADJ. ("INPUT" OR "TEST" AND "3" BUTTON)
INPUT BUTTON
TRK (TRACKING, FINE) BUTTON
PLAY BUTTON
TEST BUTTON IS HIDDEN BEHIND OF INLAY.
MULTI REMOTE CONTROL ASS'Y (CAN NOT ADJUST)
GOLD COLOR
GOLD COLOR
GOLD COLOR
GOLD COLOR
ADD BUTTON(AUDIO)

Fig. 5-2 Remote Control Ass'y for X-7/X-8 Chassis

## 5-2 Mechanical Adjustment

**Note :** Refer to the Mechanical Manual "DX7-R/DX7-RC/DX8-R/DX8-RC (AC68-20316A)" for the adjustment and confirmation of ass'y full deck.

### 5-2-1 The number and position of test point

Test point : TP02 (CTL Pulse)
TP03 (H'D S/W -Trigger)
TP04 (V. Envelope)
TP05 (Audio out)

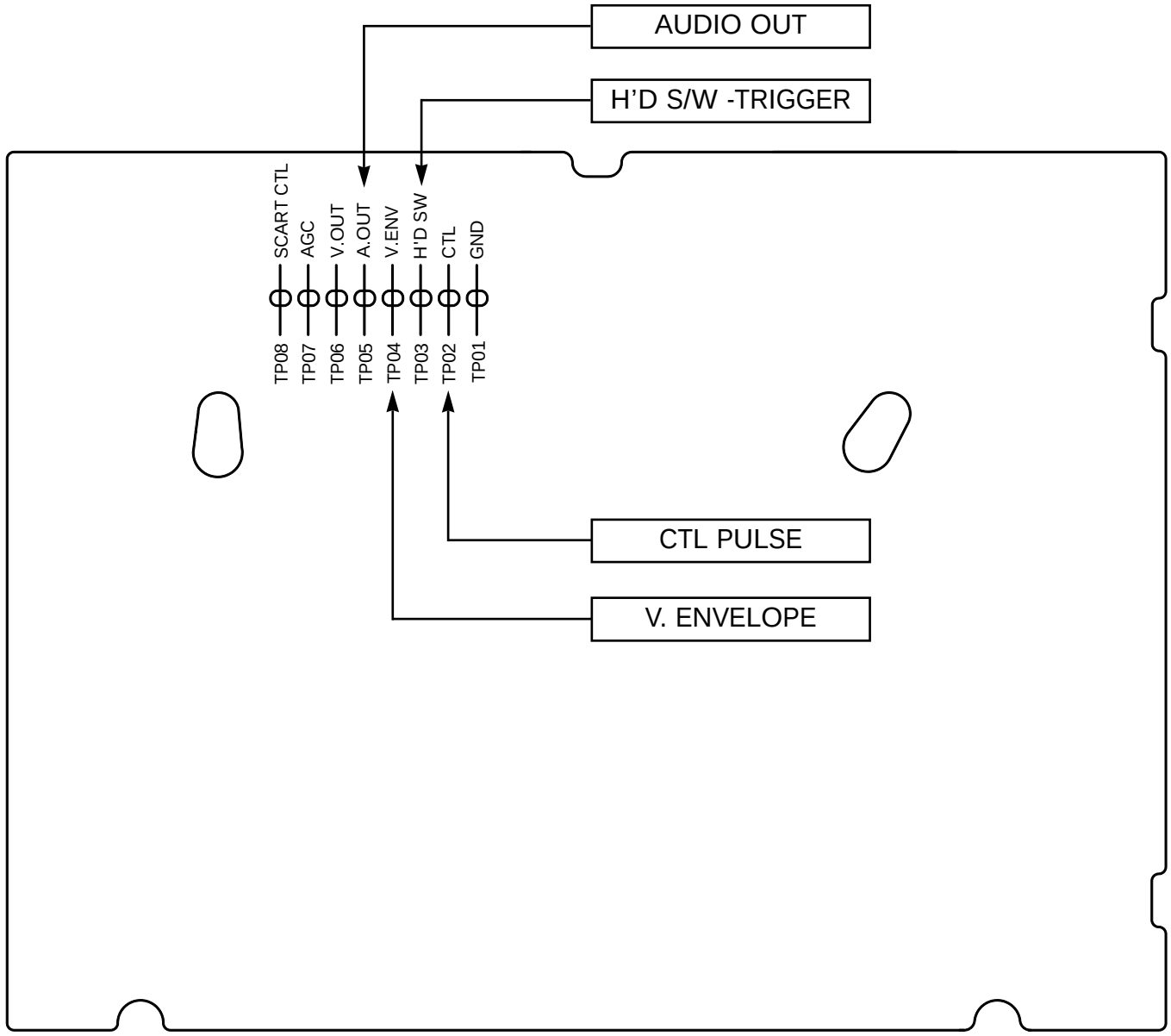



Fig. 5-3 The position of test point (Main PCB-Component side)

## 5-2-2 X-Point(Tracking center) adjustment (See the 2-2-1 (d) AC HEAD POSITION(X-POINT) ADJUSTMENT on page 2-3 of the mechanical manual)

### 5-2-2 (a) IF THE REMOTE CONTROL ASS'Y IS NOT AVAILABLE

1. Playback the colorbar alignment tape.
2. Connect CH-1 scope probe to "TP02" and CH-2 scope probe to "TP03". And then, trigger head switching pulse.
3. Set tracking preset to 15msec (2head : 0.5msec, 4head : 14.5msec) using the "**FINE(Tracking, TRK)**" button ▲ / ▼ of remote control ass'y.
4. Connect CH-1 scope probe to "TP02" and the CH-2 to "TP03" trigger on CH-1.
5. Insert the adjusting driver (+) into X-position adjusting gear. Adjust the driver in either direction for maximum envelope waveform.

**Note :** Since the adjusting gear unit may be damaged, do not adjust by force when adjusting the X-point using the adjusting driver (+). After turn the X-point adjusting screw (D) counterclockwise a little, perform the adjustment. After adjustment is completed, tighten the screw.

<Setting of scope>
- Volt/div. : CH-1 = 0.1V
  CH-2 = 0.2V
- Time/div. : 5msec

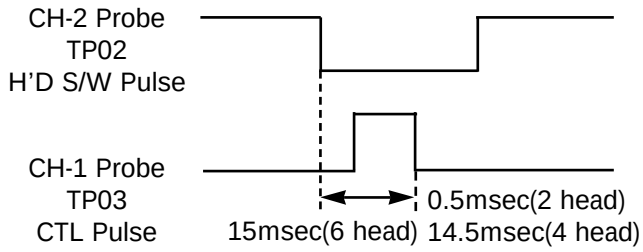



Fig. 5-4 Tracking preset adjustment

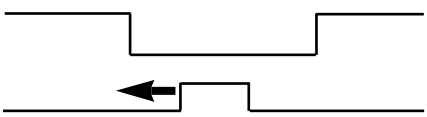
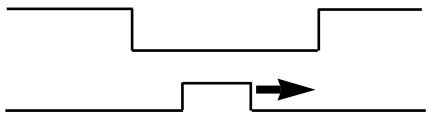
| REMOTE BUTTONS | CONTROL PULSE REMOVE |
|---|---|
| PUSH ▲ TRACKING ▼ |  |
| ▲ TRACKING ▼ PUSH |  |

Fig. 5-5 Tracking preset adjustment

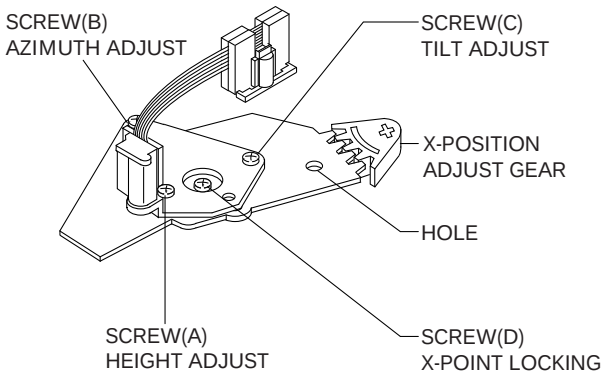



Fig. 5-6 Location of A/C Head adjustment screw

### 5-2-2 (b) IF THE REMOTE CONTROL ASS'Y (AC93-10039Y/69099-633-252) IS AVAILABLE

**Note :** How to use the "**TEST**" button.
1. Disattach the inlay of remote control ass'y. (See Fig. 5-1 and Fig. 5-2)
2. Press the "TEST" button with the pincers and the precise driver as shown in Fig. 5-1 and 5-2)

1. When using the "**INPUT**" button of remote control ass'y;

1) Simultaneously press the "**INPUT**" button and "**1**" button in PB mode.
   This will adjust the tracking center automatically.
2) Set the tracking preset using the "**FINE**(**Tracking, TRK**)" button of remote control.
3) After adjustment is completed, press the "**POWER**" button to release.

2. When using the "**TEST**" button of remote control ass'y ;

1) Simultaneously press the "**TEST**" button and "**5**" button in PB mode.
   This will adjust the tracking center automatically.
2) Set the tracking preset using the "**FINE** (**Tracking, TRK**) button of remote control.
3) After adjustment is completed, press the "**POWER**" button to release.

## 5-2-2 (b) IF THE NORMAL REMOTE CONTROL ASS'Y OF X-7/X-8(DX7-R/DX7-RC/ DX8-R/DX8-RC) CHASSIS IS AVAILABLE

**Note 1 :** Two kinds of remote control ass'y are used for X-7/X-8(DX7-R/DX7-RC/DX8-R/ DX8-RC) chassis.

1. One is a normal remote control ass'y, the other is a multi remote control ass'y
2. All adjustments are adjusted by normal remote control ass'y only.
3. For the identification of normal remote control ass'y and multi remote control ass'y, See page 5-1.

**Note 2 :** How to use the "**TEST**" button.

1. Disattach the inlay of remote control ass'y. (See Fig. 5-1 and Fig. 5-2)
2. Press the "TEST" button with the pincers and the precise driver as shown in Fig. 5-1 and 5-2)

1. When using the "**INPUT**" button of remote control ass'y;

1) Simultaneously press the "**INPUT**" button and "**1**" button in PB mode.
   This will adjust the tracking center automatically.
2) Set the tracking preset using the "**FINE**(**Tracking, TRK**)" button of remote control.
3) After adjustment is completed, press the "**POWER**" button to release.

2. When using the "**TEST**" button of remote control ass'y ;

1) Simultaneously press the "**TEST**" button and "**5**" button in PB mode.
   This will adjust the tracking center automatically.
2) Set the tracking preset using the "**FINE** (**Tracking, TRK**) button of remote control.
3) After adjustment is completed, press the "**POWER**" button to release.

# 5-3 Electrical Adjustment

## 5-3-1 Head S/W Adjustment

**Note :** Only remote control ass'y can adjust.

### 5-3-1 (a) IF REMOTE CONTROL ASS'Y (AC93-10039Y/69099-633-252) IS AVAILABLE

1. When using the "**INPUT**" button of remote control ass'y ;

1) Insert an SP tape into the housing ass'y.
2) Set the unit to stop mode.
3) Press the "**INPUT**" button and "**3**" button simultaneously.
4) Press the "**PLAY**" button.
5) This will adjust the head S/W point adjustment automatically.
6) After the adjustment is completed, press "**POWER**" button to release.

2. When using the "**TEST**" button of remote control ass'y ;

1) Insert an SP tape into the housing ass'y.
2) Set the unit to stop mode.
3) Press the "**TEST**" button and "**SP/LP**" button simultaneously.
4) Press the "**PLAY**" button.
5) This will adjust the head S/W point adjustment automatically.
6) After adjustment is completed, press the "**POWER**" button to release.

### 5-3-1 (b) IF NORMAL REMOTE CONTROL ASS'Y FOR X-7/X-8(DX7-R/DX7-RC/ DX8-R/DX8-RC) CHASSIS IS AVAILABLE

1. When using the "**INPUT**" button of remote control ass'y ;

1) Insert an SP tape into the housing ass'y.
2) Press the "**PLAY**" button.
3) Press the "**INPUT**" button and "**3**" button simultaneously.
4) This will adjust the head S/W point adjustment automatically.
5) After the adjustment is completed, press "**POWER**" button to release.

2. When using the "**TEST**" button of remote control ass'y ;

1) Insert an SP tape into the housing ass'y.
2) Press the "**PLAY**" button.
3) Press the "**TEST**" button and "**SPEED**" button simultaneously.
4) This will adjust the head S/W point adjustment automatically.
5) After adjustment is completed, press the "**POWER**" button to release.

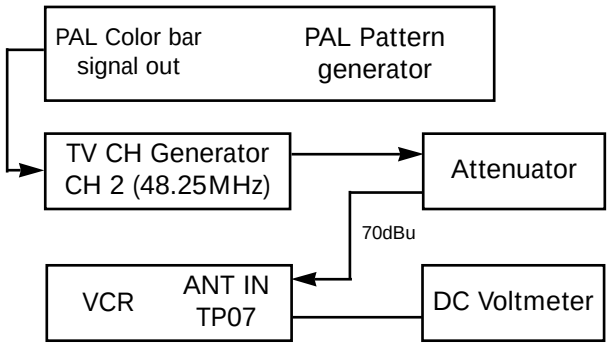
## 5-3-2 RF AGC Adjustment

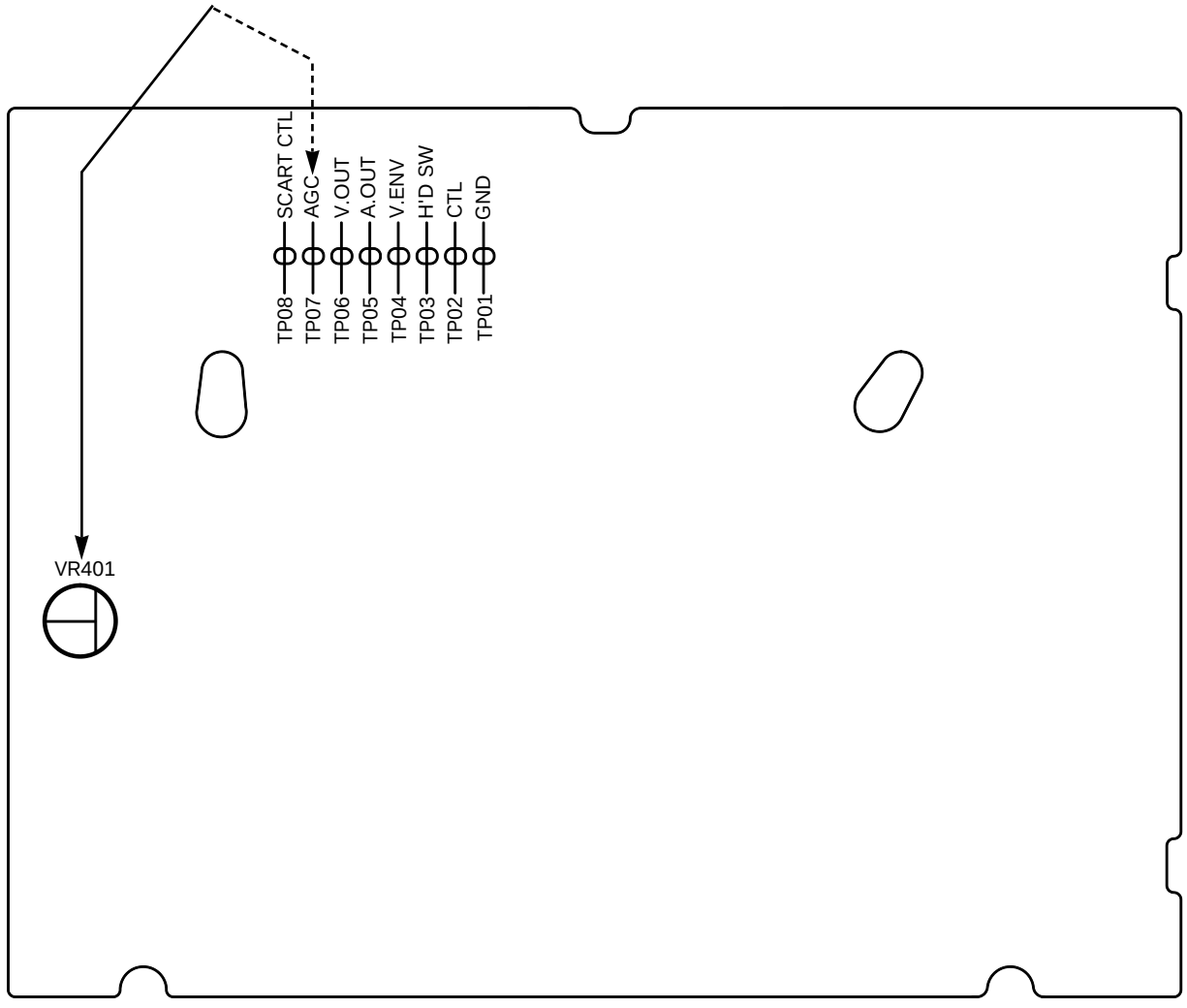
| Step | Adjustment Item |
|---|---|
| 1. Mode and input signal/ alignment tape<br>2. Test point and ADJ. part<br>3. Result and Remarks | ADJ. point<br>Test point |

### 5-3-2 (a) ADJUSTMENT PROCEDURES

1. "E-E" (stop mode), RF signal.
2. TP07 and VR401.
3. Apply PAL color bar signal to the video input terminal of the TV channel generator and set channel selector to CH 2 (48.25MHz).
4. Adjust the point signal level so that the output of attenuator is 70dBu.
5. Apply the output of attenuator to the ANT IN terminal of VCR.
6. Set the channel of VCR to CH 2.
7. Connect DC voltmeter to TP07.
8. Adjust VR401 for DC 3.7 ± 0.1V.

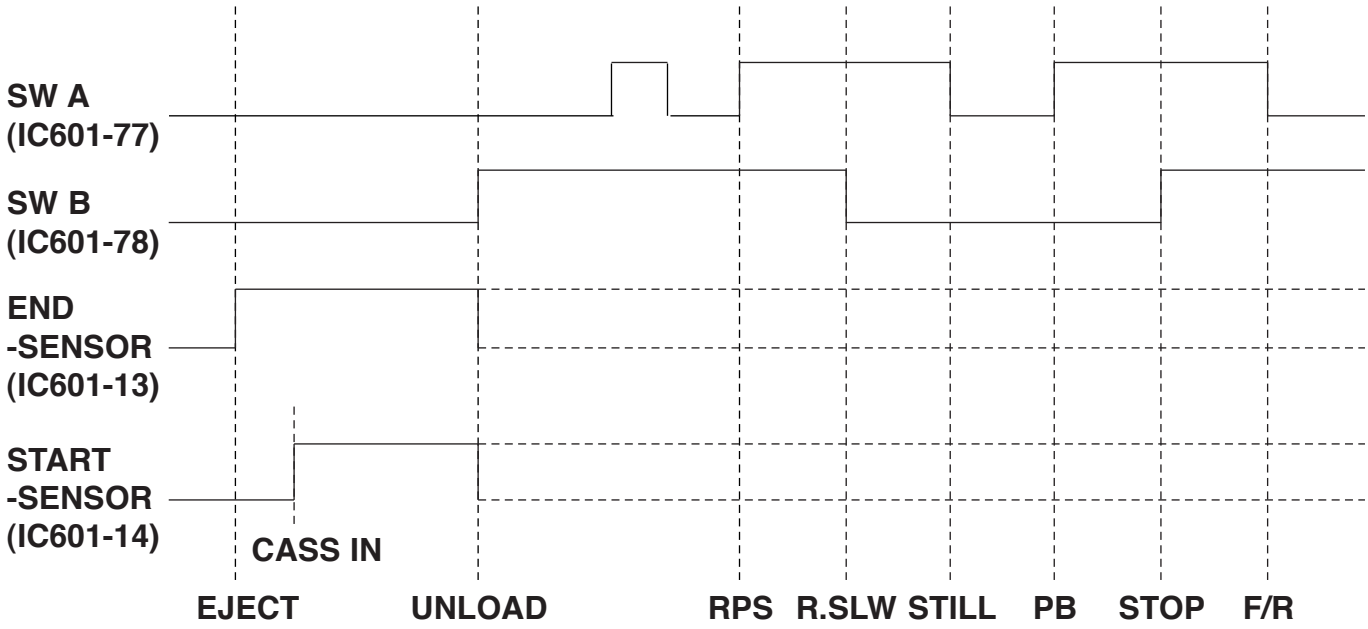
*** Composition for RF AGC adjustment**




Main PCB (Component side)

## 5-4 Timing Chart of Program S/W




| Position | Program S/W (SW601) | | | | Action Mode |
|---|---|---|---|---|---|
| | E/S | E/S | E/S | E/S | |
| Eject | L | L | L | L | Eject |
| Cassette IN | H | L H | L | L | Cassette IN |
| Unload | - | - | L | L H | Unload |
| R. PS | - | - | L H | H | R. PS, Z-R. PS |
| R. Slow | - | - | H | H L | Pinch Roller off Position |
| Still | - | - | H L | L | Still, Slow, F-ADV |
| Play | - | - | L H | L | PB, T-Stop, REC, Pause, F. PS, Z-FPS |
| Stop | - | - | H | L H | Stop, Power off |
| FF/REW | - | - | H L | H | FF, REW |

# MEMO

# 6. Exploded View and Parts List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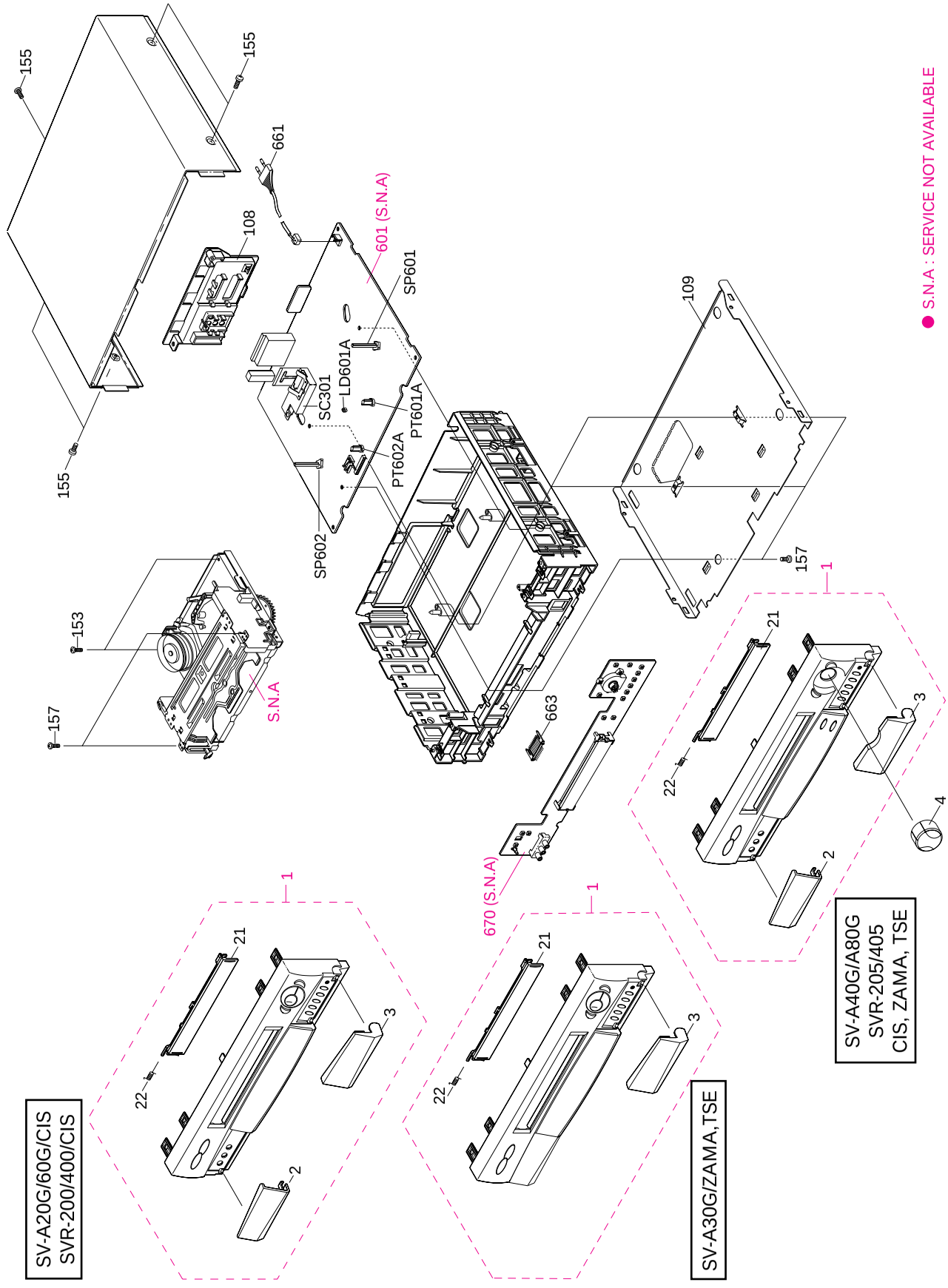
6-2 Mechanical Parts (Top Side) - - - - - - - - - - - - - - - - - 6-4

6-3 Mechanical Parts (Bottom Side) - - - - - - - - - - - - - 6-6

6-4 Housing Assembly - - - - - - - - - - - - - - - - - - - - - - - 6-8

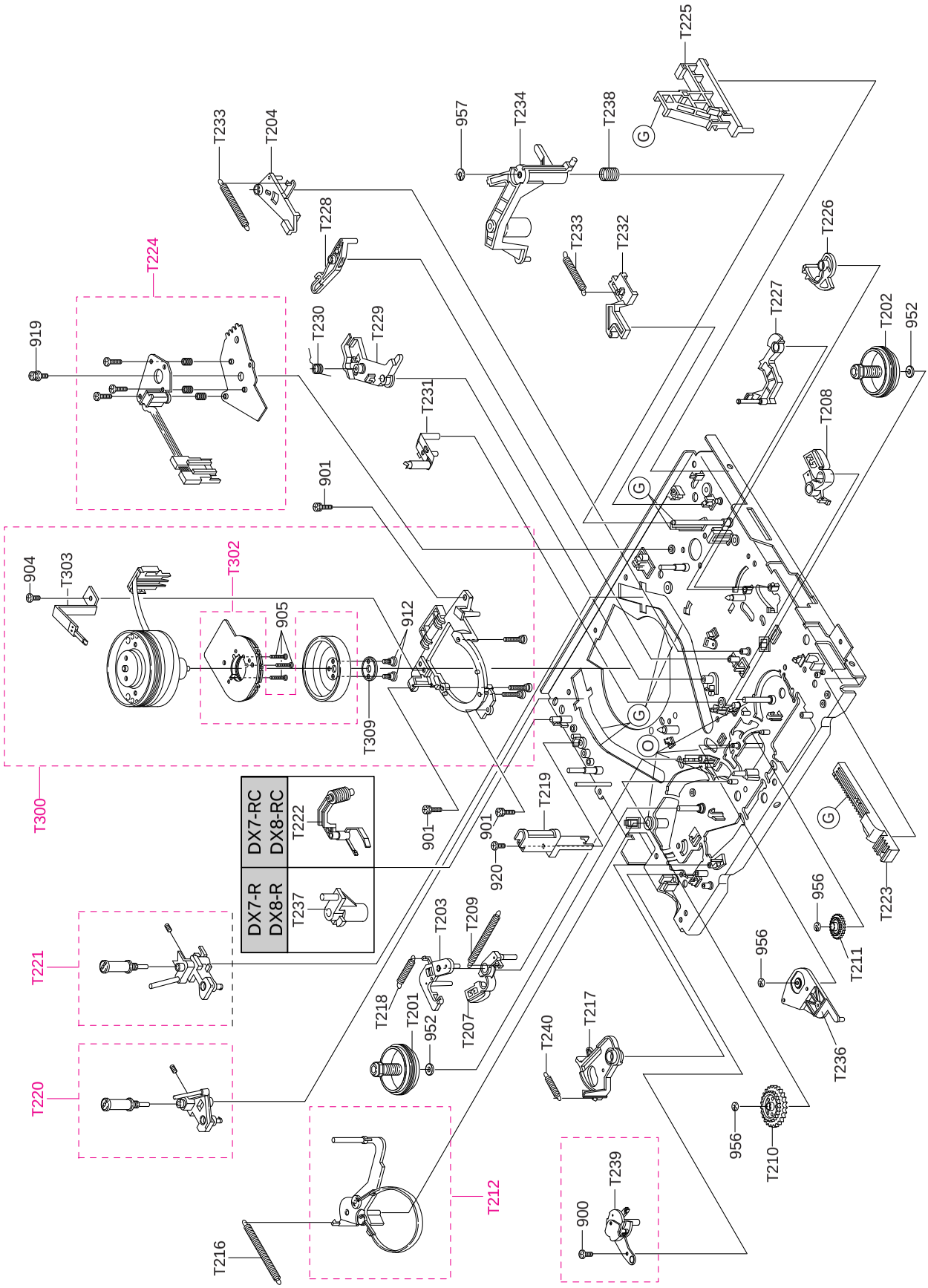
# 6-1 Cabinet Assembly



| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| - | DO NOT ORDER | ASSY-FULL DECK (DX7-R) | (S.N.A) |
| 1 | AC98-11212Q | ASSY-PANEL FRONT;SV-A20G/CIS,SVR-200 | |
| | AC98-11212P | ASSY-PANEL FRONT;SV-A60G/CIS,SVR-400 | |
| | AC98-11210M | ASSY-PANEL FRONT;SV-A80G/CIS,SVR-405 | |
| | AC98-11214A | ASSY-PANEL FRONT;SV-A80G/ZAMA | |
| 2 | AC64-50884B | DOOR-FRONT(L);SV-A20G/A40G/A60G/A80G CIS,TSE,ZAMA | NO SV-A30G |
| 3 | AC64-50908B | DOOR-FRONT(R);SV-A20G/CIS,SVR-200 | |
| | AC64-50908A | DOOR-FRONT(R);SV-A60G/CIS,SVR-400 | |
| | AC64-50885C | DOOR-FRONT(R);SV-A80G/CIS,SVR-405 | |
| | AC64-50885D | DOOR-FRONT(R);SV-A80G/ZAMA | |
| 4 | AC64-10856A | KNOB-SHUTTLE;SV-A40G/80G/SVR-205/405 | SHUTTLE OPTION |
| 21 | AC64-50883H | DOOR-CASSETTE;SV-A20G/CIS,SVR-200 | |
| | AC64-50883J | DOOR-CASSETTE;SV-A60G/A80G/CIS,SVR-400/405 | |
| | AC64-50883S | DOOR-CASSETTE;SV-A80G/ZAMA | |
| 22 | AC61-62003A | SPRING;-,SUS304,(GE/RCA) | |
| 108 | AC61-10972U | CONNECTOR BOARD-ASSY;SV-A30G ONLY | NO FRONT A/V |
| | AC61-10972U | CONNECTOR BOARD-ASSY;SV-A20G/40G/60G/80G | FRONT A/V |
| 109 | AC63-32126A | COVER-BUTTOM;SV-D140F,- | |
| 153 | AC60-12126A | SCREW-BH;-,BH,-,4*12,FE,FZY,-,-,- | |
| 155 | AC60-12134A | SCREW-TAP BH;-,BH,-,2-4X16,-,FE | |
| 157 | AC60-10063A | SCREW-TAPTITE;BH,+,-,M3,L12,ZPC3,SWRCH18A | |
| 601 | DO NOT ORDER | ASSY-MAIN | (S.N.A) |
| 661 | AC39-10019A | POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-KE | |
| 663 | 3711-002603 | CONNECTOR-HEADER;NOWALL,20P,1R,1.5MM,STRAIGHT,SN | |
| 670 | DO NOT ORDER | ASSY-F/TIMER | (S.N.A) |
| LD601A | AC61-22345A | HOLDER-LED;POM,-,-,-,-,- | |
| PT601A | AC61-22344A | HOLDER-PHOTO;POM,-,-,-,-,- | |
| PT602A | AC61-22344A | HOLDER-PHOTO;POM,-,-,-,-,- | |
| SC301 | AC98-12023J | ASSY-SH/CASE TOP;SV-A140F,IS-PAL ASSY S/C TOP | |
| SP601 | AC61-22321A | HOLDER-TR;POM,-,-,-,-,- | |
| SP602 | AC61-22321A | HOLDER-TR;POM,-,-,-,-,- | |

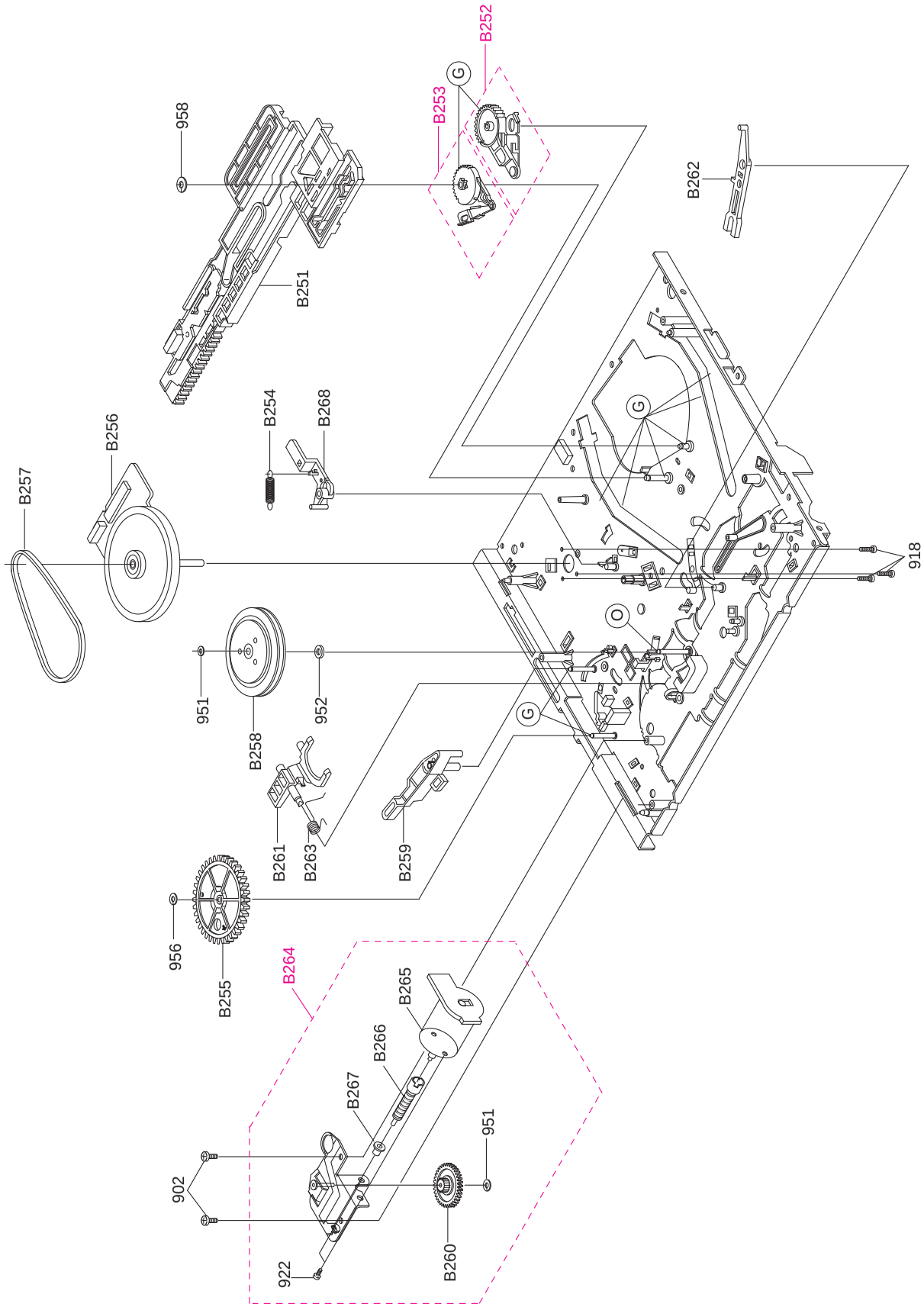
**Note :** Location number 1, 2, 3, 21 are only for model SV-A20G/60G/80G/CIS,SVR-200/400/405/CIS (SMSC, SALSC, SUSC) and SV-A80G/ZAMA.
Please, refer to the separate information for the other models combind.

# 6-2 Mechanical Parts (Top Side)



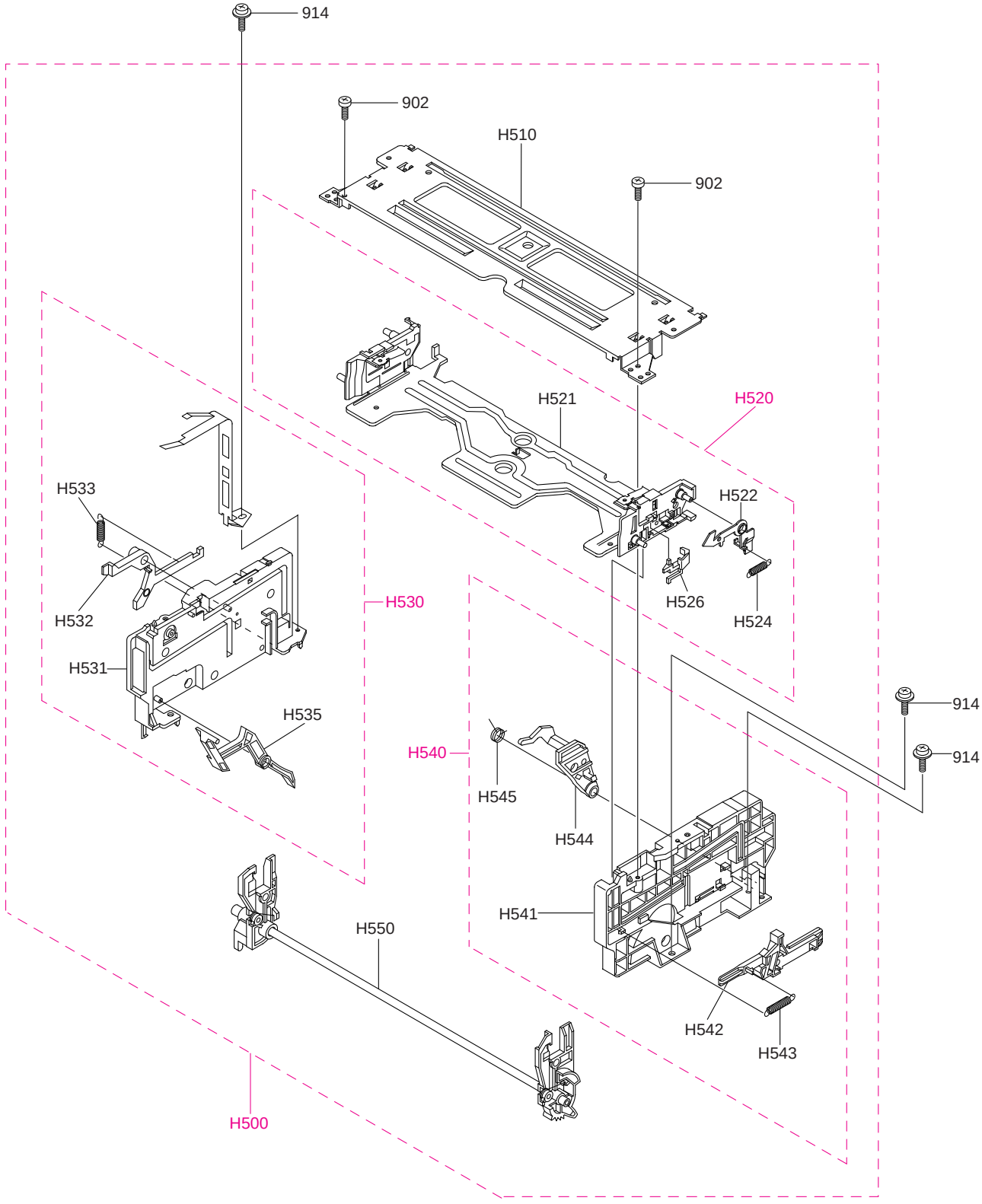
| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| 900 | AC60-12091A | SCREW-MACHINE;FP,BH,-,M3,L4,SWRCH10A,YEL ROB | |
| 901 | AC60-10012A | SCREW-MACHINE;BH,+,M3,L8,-,FE,-,-,- | |
| 904 | AC60-12125A | SCREW-PH;-,-,-,M3X6 TAP TITE,-,-,-,-,- | |
| 905 | AC60-12096A | SCREW-MACHINE;FP,PH,-,M2.6,X10,SWRCH1-A,YEL | |
| 912 | 67094-604-710 | SCREW-DAMPER;M2.0X7.0 SWCM 10(MFZN2-C) | |
| 919 | AC60-10004A | SCREW-MACHINE;BH,+,M3,L8,ZPC,SWRCH18A,-,-,- | |
| 920 | AC60-10007A | SCREW-TAPPING;BH,+,M2.6,L12,-,SWRCH18A,-,-,- | |
| 952 | AC60-30018A | WASHER-PLAIN;PLAIN,M3.2,D6,T0.5,POLYSLIDER, | |
| 956 | AC60-30007A | WASHER-SLIT;PLAIN,ID2.5,OD7,T0.5,SPC1,-,- | |
| 957 | AC60-30008A | WASHER-SLIT;-,ID3.5,OD9,T0.5,SPC1,-,- | |
| T201 | AC66-10023A | REEL-DISK L ASSY;POM,-,PACKAGE,X-5,- | |
| T202 | AC66-10022A | REEL-DISK R (ASSY);POM,-,PACKAGE,X-5,- | |
| T203 | AC66-30474A | BRAKE-SUB L;-,PBT,-,-,-,X-5/IS | |
| T204 | AC66-30148A | BRAKE SUB R-ASSY;PBT,-,-,-,X5,- | |
| T207 | AC66-30475A | BRAKE-MAIN L ASS'Y;-,POM+PELT,-,-,-,X-5/IS | |
| T208 | AC66-30476A | BRAKE-MAIN R ASS'Y;-,POM+PELT,-,-,-,X-5/IS | |
| T209 | AC61-60112A | SPRING- BRAKE MAIN;ES,SUS304WPB,PI0.35,ID2.8,OD4. | |
| T210 | AC66-20073A | GEAR RELAY S-ASSY;-,PEBAX,M0.5,M48,SP,X5,- | |
| T211 | AC66-20037A | GEAR- RELAY T;PEBAX7033,X-5,Z39,GEAR-SPUR,D1 | |
| T212 | AC66-30073A | ARM-TENSION ASSY;-,-,-,CKD,DX5-R,- | |
| T216 | AC61-60119A | SPRING TENSION;ES,SWPB,PI0.35,ID2.1,L33(OD3.8),-, | |
| T217 | AC66-30470A | LEVER-REC S/W;-,PBT #3300,T4.0,L32,-,(X-5/IS | |
| T218 | AC61-62017A | SPRING-SUB BRAKE L;ES,SUS304,PI0.23,D3.5,L14.8,-, | |
| T219 | AC33-10003P | HEAD- MAGNET F/E;MH131S,-,-,-,L51.05XW7.4XH12.3 | |
| T220 | AC66-82050A | SLIDER-G/R ASSY(S);-,-,-,-,X-5 | |
| T221 | AC66-82059A | SLIDER-G/R ASSY T;-,-,-,-,X-7(VW-31H) | |
| T222 | AC33-10002E | HEAD-CLEANER;-,-,-,-,-,X-5 | (OPTIONAL) |
| T223 | AC66-20065A | RACK-HOUSING;L74.29,POM M90-44,BLK,M1,3.14, | |
| T224 | AC33-10215A | HEAD-ACE ALL ASSY;-,X-7,-,-,- | |
| T225 | AC66-80005A | SLIDER-PINCH;POM(M90-44),T2,L54.35,NAT,DX-5 | |
| T226 | AC66-30014A | LEVER-REVIEW;ZYTEL(70G-43L),T3.8,-,PCD25.6, | |
| T227 | AC66-30099A | ARM REVIEW CKD;-,-,-,-,DX5-RV,- | |
| T228 | AC66-30013A | LEVER-PINCH CAM;PBT 6300T,-,L45,W9,X-5,- | |
| T229 | AC66-30003A | LEVER PINCH COUP;PBT 3300,T7.5,L45.25,-,-,X-5 | |
| T230 | AC61-60116A | SPRING- PINCH COMP;TS,SWPB,PI1.0,D6,L38(OD8),-,- | |
| T231 | AC67-32001A | PRISM-LED;PMMA,D5,IF-850,-,-,- | |
| T232 | AC66-82049A | SLIDER-PUSH;LUPOX 2150,T2,-,NTR,- | |
| T233 | AC61-62016A | SPRING-SLIDE PUSH;ES,SUS304WPB,PI0.55,D3.55,L24. | |
| T234 | AC59-90001B | UNIT-PINCH ROLLER;X-5,-,YAMAUCHI | |
| T236 | AC66-10010A | IDLER-ASSY;PACKAGE,-,X-5,- | |
| T237 | AC61-40054A | STOPPER-TAPE;POM M90-44,OD7,T1.5,NTR,X-5,- | (OPTIONAL) |
| T238 | AC61-60132A | SPRING ARM PINCH;CS,SUS304WPB,PI0.4,D7.1,OD7.9, | |
| T239 | AC66-30132A | LEVER JOG-ASSY;-,-,-,-.X5,- | (DX8-R/RC ONLY) |
| T240 | AC61-60505A | SPRING-REC S/W;-,ES,SUS304 WPB,PI0.29,PI3.5,- | |
| T300 | AC96-10011L | ASSY-CYLINDER;CX5-S2P/DLC,- | 2 HEAD OPTION |
| | AC96-10011N | ASSY-CYLINDER;CX5-D4P/DLC,- | 4 HEAD OPTION |
| T302 | AC31-12001M | MOTOR-CYLINDER;E20XL03,-,- | |
| T303 | AC33-12004S | HEAD-BRUSH(ASSY);SECC20/20+CARBON,-,-,-,- | |
| T309 | AC73-12001A | RETRINER-RUBBER(ASSY);SECC+SILICON,-,-,- | |

# 6-3 Mechanical Parts (Bottom Side)



| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| 902 | AC60-10051A | SCREW-TAPPING;BH,-,-,M3,L8,FZY | |
| 918 | AC60-10006A | SCREW-MACHINE;BH,+I90,M2.6,L7,ZPC,SWRCH18A,- | |
| 922 | 67008-130-171 | SCREW PH;+M3X3 FE FZY | |
| 951 | AC60-30025A | WASHER-SLIT;-,ID2.5,OD5.0,T0.5,POLY SLIDE, | |
| 952 | AC60-30018A | WASHER-PLAIN;PLAIN,M3.2,D6,T0.5,POLYSLIDER, | |
| 956 | AC60-30007A | WASHER-SLIT;PLAIN,ID2.5,OD7,T0.5,SPC1,-,- | |
| 958 | AC60-30028A | WASHER-SLIT;-,D2.5,D9.0,T0.5,NUMIRROR,-,- | |
| B251 | AC66-80001A | SILDER- MAIN;PBT2002K,T12.4,L206.2,NAT,DX-5 | |
| B252 | AC66-20019A | GEAR-LOADING L ASSY;-,-,-,PACKAGE,-,X-5,- | |
| B253 | AC66-20069A | GEAR LOADING R;-,-,-,-,-,X5,- | |
| B254 | AC61-60115A | SPRING-BRAKE CAPSTAN;ES,SUS304WPB,PI0.4,D22,L16.1( | |
| B255 | AC66-20004A | GEAR-MASTER;POM (M90-44),M 1,Z 60,SP,-,X-5 | |
| B256 | AC31-12003A | MOTOR-D.D CAPSTAN;F2QTB26,250MAX,- | |
| B257 | AC66-62007A | BELT-CAPSTAN;5CM-70 FR,W2 T2 L88.6,-,-,-,- | |
| B258 | AC66-20066A | CLUTCH-ASSY;-,-,-,-,-,X5,- | |
| B259 | AC66-32185A | LEVER-SLIDER PINCH;PBT,T4,NAT,-,-,- | |
| B260 | AC66-20016A | GEAR- WORM WHEEL;POM SW-01,M0.55/M1,Z57/Z10,GEA | |
| B261 | AC66-30011A | LEVER- SHIFT;PBT2002K,T10.9,L35,-,-,- | |
| B262 | AC66-30012A | LEVER- IDELR CHANGE;PBT330,T3.3,L50,-,W6.0,- | |
| B263 | AC61-60111A | SPRING-LEVER SHIFT;TS,SWPB,PI0.7,D5.5,L13.8(OD6.9 | |
| B264 | AC59-90001A | UNIT-LOADING ASSY;X-5,-,- | |
| B265 | 66823-0060-00 | MOTOR-LOADING ASSY;POM+RF370C X-5 | |
| B266 | AC66-20039A | GEAR- WORM LO;PBT 2002K,-,-,-,D4.5,3,- | |
| B267 | AC61-20224A | HOLDER SHAFT;POM M90-44,T1.25,NAT,PI5XH5.5, | |
| B268 | AC66-30149A | BRAKE CAPSTAN-ASSY;POM,-,-,-,X5,- | |

# 6-4 Housing Assembly



| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| 902 | AC60-10051A | SCREW-TAPPING;BH,-,-,M3,L8,FZY | |
| 914 | AC60-10067A | SCREW-TAPTITE;PWH,+,-,M3,L8,MFZN2-C,SWCH1018 | |
| H500 | AC61-82014A | HOUSING-ASSY;-,X7FL26280A,230X130X60,-,X-7 | |
| H510 | AC61-10006A | CHASSIS- UPPER;SECC 20/20,-,T1.0,BLK,-,X5,- | |
| H520 | AC61-20932A | HOLDER-CASSETTE ASSY;-,X5FL06080A,-,-,-,X-7 | |
| H521 | AC61-20922A | HOLDER-CASSETTE;-,SECC T1.2,-,NAT,-,(X-5/IS) | |
| H522 | AC66-30018A | LEVER-LOCK R;SECC 20/20,T1.2,L44,W32,-,- | |
| H524 | AC61-60121A | SPRING-LEVER LOCK;ES,SUS304 WPB,PI0.2,D2.6,L9.9( | |
| H526 | AC66-30019A | LEVER-KEY CASSETTE;LUCEL N109-LD,T2.5,L20,W15.2,- | |
| H530 | 62203-0105-00 | CHASSIS-SIDE L(ASSY);ABS X5FL0505A X-5 | |
| H531 | AC61-10004A | CHASSIS- SIDE L;ABS HF-380,-,T10,BLK,-,X5,BLK | |
| H532 | AC66-30004A | LEVER- LIGHT SHUTTER;LUCEL N109-LD,T2.5,L61.7,BLK, | |
| H533 | AC61-60142A | SPRING- LIGHT;ES,SUS304WPB,PI0.2,L11.4(OD3.7 | |
| H535 | AC66-30017A | LEVER- DOOR;LUCELN109-LD,T5,L74.3,W21.1,-, | |
| H540 | 62203-0104-00 | CHASSIS-SIDE R(ASSY);ABS X5FL0505A X-5 | |
| H541 | AC61-10003A | CHASSIS- SIDE R;ABS HF-380,-,T10,BLK,-,X5,BLK | |
| H542 | AC66-80008A | SLIDER DAMPER;LUCEL N109-LD,T4,L87,-,-,- | |
| H543 | AC61-60120A | SPRING-SLIDE DAMPER;ES,SUS 304WPB,PI0.4,D3.8,L25(O | |
| H544 | AC66-30016A | LEVER- LID OPENER;LUCEL N109-LD,T5.0,L34.7,W16.6 | |
| H545 | AC61-60123A | SPRING-LID OPENER;TS,SWPB,PI0.55,D8.9,L15(OD10), | |
| H550 | 61403-0073-00 | SHAFT-ARM(ASSY);SUM24L X5FL0405A X-5 | |

# MEMO

# 7. Electrical Parts List

**Note :** According to the change of Part-No system, old and new parts are listed in this service manual together. When ordering a service part, be sure to use the only new part.

| Loc. No | New Part No | | Description and Specification | Remark |
|---|---|---|---|---|
| **601** | **DO NOT ORDER** | | **ASSY-MAIN** | **(S.N.A)** |
| **SMPS/POWER PARTS** | | | | |
| C1P02 | 2301-000383 | | C-FILM,PEF;10NF,5%,50V,6X7X3.2MM,5MM,TP | |
| C1P03 | 2401-001954 | | C-AL;4.7UF,20%,50V,GP,5X11MM,5,TP | |
| C1P04 | 2401-001975 | | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| C1P05 | 2401-001511 | | C-AL;47UF,20%,16V,GP,6X7,5,- | |
| C1P06 | 2401-001915 | | C-AL;1UF,20%,50V,GP,3X5,1MM,TP | |
| C1P09 | 2401-001912 | | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| C1P10 | 2202-000797 | | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C1S03 | 2305-001021 | ⚠ | C-FILM,MPEF;100NF,20%,275V,17.5X7X13.5,15M | |
| C1S04 | 2305-001021 | ⚠ | C-FILM,MPEF;100NF,20%,275V,17.5X7X13.5,15M | |
| C1S05 | 2201-000808 | ⚠ | C-CERAMIC,DISC;2.2NF,10%,400V,Y5P,TP,12X7.5,7 | |
| C1S06 | 2201-000934 | ⚠ | C-CERAMIC,DISC;3.3NF,20%,400V,Y5P,TP,18X8,10 | |
| C1S08 | 2401-001682 | ⚠ | C-AL;82UF,20%,400V,GP,22X25,10MM, | |
| C1S09 | 2301-000140 | | C-FILM,PEF;10NF,10%,630V,16.5X9.5X5.7X,12 | |
| C1S10 | 2201-000915 | | C-CERAMIC,DISC;100PF,10%,1KV,Y5P,TP,6X5,5 | |
| C1S15 | 2301-000224 | | C-FILM,PEF;22NF,5%,50V,7.4X3.9X13MM,5MM,T | |
| C1S16 | 2201-000796 | | C-CERAMIC,DISC;10NF,10%,50V,Y5P,TP,6.5X3,5 | |
| C1S17 | 2401-000970 | | C-AL;22UF,20%,50V,WT,5X11,2MM,TP | |
| C1S18 | 2301-000224 | | C-FILM,PEF;22NF,5%,50V,7.4X3.9X13MM,5MM,T | |
| C1S19 | 2401-001912 | | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| C1S30 | 2401-000385 | | C-AL;10UF,20%,100V,GP,6.3X11,2.5MM, | |
| C1S31 | 2401-001134 | | C-AL;330UF,20%,35V,WT,10X16,5MM,TP | |
| C1S32 | 2401-001998 | | C-AL;1000UF,20%,25V,GP,10X20,5MM,TP | |
| C1S33 | 2401-001125 | | C-AL;330UF,20%,25V,WT,10X12.5,5MM,T | |
| C1S34 | 2401-001992 | | C-AL;2200UF,20%,10V,GP,10X20MM,5MM, | |
| C1S35 | 2401-001355 | | C-AL;470UF,20%,10V,GP,8X11.5,5MM, | |
| C1S36 | 2401-001583 | | C-AL;47UF,20%,50V,WT,6.3X11,2.5MM,T | |
| C1S37 | 2401-001374 | | C-AL;470UF,20%,16V,WT,10X12.5,2.5MM | |
| C1S38 | 2301-000129 | | C-FILM,PEF;100NF,5%,50V,10X9X4.3X5,5MM,TP | |
| C1S39 | 2301-000383 | | C-FILM,PEF;10NF,5%,50V,6X7X3.2MM,5MM,TP | |
| CN1S1 | 3711-000178 | ⚠ | CONNECTOR-HEADER;1WALL,2P,1R,3.96MM,STRAIGHT,SN | |
| D1P01 | 0402-000127 | | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| D1P02 | 0402-000127 | | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| D1P03 | 0402-000127 | | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| D1P06 | 0401-000101 | | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D1P20 | 0402-000127 | | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| D1S01 | 0402-001009 | ⚠ | DIODE-RECTIFIER;1SR139,600V,1A,MSR | |
| D1S02 | 0402-001009 | ⚠ | DIODE-RECTIFIER;1SR139,600V,1A,MSR | |
| D1S03 | 0402-001009 | ⚠ | DIODE-RECTIFIER;1SR139,600V,1A,MSR | |
| D1S04 | 0402-001009 | ⚠ | DIODE-RECTIFIER;1SR139,600V,1A,MSR | |
| D1S05 | 0402-000378 | | DIODE-RECTIFIER;EG01C,1000V,500MA,DO-41 | |
| D1S07 | 0402-001013 | | DIODE-RECTIFIER;1SR153-400,400V,800MA,DO-41 | |
| D1S30 | 0402-001013 | | DIODE-RECTIFIER;1SR153-400,400V,800MA,DO-41 | |
| D1S31 | 0402-001013 | | DIODE-RECTIFIER;1SR153-400,400V,800MA,DO-41 | |
| D1S32 | 0402-000431 | | DIODE-RECTIFIER;FML-M02S,200V,2.5A,TO-220F | |
| D1S33 | 0402-000431 | | DIODE-RECTIFIER;FML-M02S,200V,2.5A,TO-220F | |

| Loc. No | New Part No | | Description and Specification | Remark |
|---|---|---|---|---|
| D1S34 | 0402-001013 | | DIODE-RECTIFIER;1SR153-400,400V,800MA,DO-41 | |
| D1S35 | 0402-001013 | | DIODE-RECTIFIER;1SR153-400,400V,800MA,DO-41 | |
| F1S01 | A3065-0157 | ⚠ | FUSE;FST 250V 1.6A 20MM SEMKO S505 C | |
| IC1P01 | AC14-12001E | | IC;KA7809,-,- | |
| IC1S1 | 1203-001049 | ⚠ | IC-PWM CONTROLLER;1L0380,TO-220F,4P,10MIL,PLASTI | |
| IC1S2 | B4161-0030 | ⚠ | PHOTO-COUPLER;PS2561-1 ST DIP | |
| IC1S3 | AC14-12006D | ⚠ | IC;KA431Z,TO-92,TAPING | |
| L1S01 | AC29-30050A | ⚠ | FILTER-LINE NOISE;-,400UH,-,250V,- | |
| L1S02 | A1151-0042 | ⚠ | COIL-LINE FILTER;BSF-2120Z 25MH 3.2OHM | |
| L1S04 | AC27-92001M | | INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,- | |
| L1S05 | AC27-92001M | ⚠ | INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,- | |
| L1S30 | AC27-12001N | | COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-, | |
| L1S31 | AC27-12001N | | COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-, | |
| L1S32 | AC27-92001M | | INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,- | |
| L1S33 | AC27-92001M | | INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,- | |
| L1S34 | AC27-92001M | | INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,- | |
| PT1S01 | AC26-20120A | ⚠ | TRANS-SWITCHING;-,220V,UL/CSA,-,1000UH,-,SV-D1 | |
| Q1P01 | 0501-000610 | | TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,TP,160 | |
| Q1P02 | 0504-000116 | | TR-DIGITAL;KSR1001,NPN,300MW,4.7K-4.7K,TO | |
| Q1P03 | 0501-000610 | | TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,TP,160 | |
| Q1P04 | 0504-000118 | | TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO-9 | |
| Q1P05 | 0501-000616 | | TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L,TP,16 | |
| Q1P06 | 0501-000616 | | TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L,TP,16 | |
| Q1P07 | 0501-000398 | | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| R1P02 | 2004-001096 | | R-METAL;560OHM,5%,1/4W,AA,TP,2.4X6.4MM | |
| R1P03 | 2001-000273 | | R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R1P04 | 2001-000611 | | R-CARBON;3.9KOHM,5%,1/4W,AA,TP,2.4X6.4M | |
| R1P05 | 2001-000449 | | R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R1P06 | 2001-000429 | | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R1P07 | 2001-000221 | | R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R1P09 | 2004-000571 | | R-METAL;220OHM,5%,1/4W,AA,TP,2.4X6.4MM | |
| R1P10 | 2001-000449 | | R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R1S02 | 2003-000273 | | R-METAL OXIDE;33KOHM,5%,2W,AA,TP,6X16MM | |
| R1S03 | 2001-000076 | | R-CARBON;47KOHM,5%,1/4W,AA,TP,2.4X6.4MM | |
| R1S06 | 2003-000273 | | R-METAL OXIDE;33KOHM,5%,2W,AA,TP,6X16MM | |
| R1S07 | 2001-000302 | | R-CARBON;10OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R1S11 | 2006-000262 | | R-CEMENT;2.7OHM,10%,2W,CB,ST,7.5X11X20. | |
| R1S12 | 2001-000076 | | R-CARBON;47KOHM,5%,1/4W,AA,TP,2.4X6.4MM | |
| R1S13 | 2001-000076 | | R-CARBON;47KOHM,5%,1/4W,AA,TP,2.4X6.4MM | |
| R1S14 | 2001-000076 | | R-CARBON;47KOHM,5%,1/4W,AA,TP,2.4X6.4MM | |
| R1S15 | 2003-000148 | | R-METAL OXIDE;100OHM,5%,2W,AE,TP,6X16MM | |
| R1S30 | 2001-000515 | | R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R1S31 | 2001-000221 | | R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R1S32 | 2001-000429 | | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R1S33 | 2004-000869 | | R-METAL;3KOHM,1%,1/8W,AA,TP,1.8X3.2MM | |
| R1S34 | 2004-000459 | | R-METAL;2.2KOHM,1%,1/8W,AA,TP,1.8X3.2M | |
| R1S35 | 2001-000440 | | R-CARBON;1OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| VA1S01 | 1405-000186 | ⚠ | VARISTOR;470V,4500A,17X12MM,TP | |
| VA1S02 | 1405-000186 | ⚠ | VARISTOR;470V,4500A,17X12MM,TP | |
| ZD1P02 | 0403-000557 | | DIODE-ZENER;MTZ5.1C,5.1V,5.09-5.37V,500MW, | |
| ZD1S01 | 0403-000539 | | DIODE-ZENER;MTZ18C,18V,17.42-18.33V,500MW, | |
| ZD1S2 | 0403-000294 | | DIODE-ZENER;MTZ4.7B,4.7V,4.55-4.80V,500MW, | |

**SYSTEM CONTROL/SERVO PARTS**

| | | | | |
|---|---|---|---|---|
| C601 | 2203-002188 | | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |

| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| C602 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C603 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C604 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C605 | 2203-001577 | C-CERAMIC,CHIP MELF;150PF,10%,50V,Y5E,TP,2012,2M | |
| C606 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C607 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C608 | 2202-000780 | C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5 | |
| C609 | 2203-001680 | C-CERAMIC,CHIP;68NF,20%,50V,Y5V,TP,2012,2MM | |
| C610 | 2203-001680 | C-CERAMIC,CHIP;68NF,20%,50V,Y5V,TP,2012,2MM | |
| C6101 | 2203-001608 | C-CERAMIC,CHIP;22NF,+80-20%,50V,Y5V,TP,2012,- | |
| C6102 | 2203-000239 | C-CERAMIC,CHIP;100PF,5%,50V,NPO,TP,2012,- | |
| C6103 | 2203-001620 | C-CERAMIC,CHIP MELF;27PF,5%,50V,SL,TP,2012,2MM | |
| C6104 | 2203-001620 | C-CERAMIC,CHIP MELF;27PF,5%,50V,SL,TP,2012,2MM | |
| C6105 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C6106 | 2301-000392 | C-FILM,PEF;15NF,5%,50V,6.5X8.5X3.2MM,5MM, | |
| C6107 | 2203-000818 | C-CERAMIC,CHIP;33PF,5%,50V,NPO,TP,2012,- | |
| C611 | 2203-000533 | C-CERAMIC,CHIP;2.7NF,10%,50V,X7R,TP,2012,- | |
| C6114 | 2201-000799 | C-CERAMIC,DISC;12PF,5%,50V,CH,TP,5X3,5 | |
| C6116 | 2203-001612 | C-CERAMIC,CHIP MELF;22PF,5%,50V,SL,TP,2012,2MM | |
| C6117 | 2203-001612 | C-CERAMIC,CHIP MELF;22PF,5%,50V,SL,TP,2012,2MM | |
| C6119 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| C612 | 2203-001577 | C-CERAMIC,CHIP MELF;150PF,10%,50V,Y5E,TP,2012,2M | |
| C6120 | 2202-000780 | C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5 | |
| C6122 | 2401-001952 | C-AL;4.7UF,20%,50V,-,4X7MM,5,TP | |
| C6123 | 2401-001978 | C-AL;47UF,20%,25V,GP,6.3X5,-,TP | |
| C6124 | 2401-001325 | C-AL;470NF,20%,50V,GP,3X5,5,TP | |
| C6126 | 2401-000419 | C-AL;10UF,20%,16V,GP,5X11,5,- | |
| C613 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C614 | 2202-000780 | C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5 | |
| C615 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C616 | 2203-001591 | C-CERAMIC,CHIP MELF;1NF,20%,25V,Y5S,TP,2012,2MM | |
| C617 | 2203-001591 | C-CERAMIC,CHIP MELF;1NF,20%,25V,Y5S,TP,2012,2MM | |
| C618 | 2203-001702 | C-CERAMIC,CHIP;2.2NF,5%,50V,X7R,TP,2012,- | |
| C619 | 2203-001696 | C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,2012,2MM | |
| C620 | 2203-001696 | C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,2012,2MM | |
| C621 | 2203-000260 | C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012,- | |
| C622 | 2203-001608 | C-CERAMIC,CHIP;22NF,+80-20%,50V,Y5V,TP,2012,- | |
| C623 | 2203-001580 | C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,2012,2MM | |
| C624 | 2203-001580 | C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,2012,2MM | |
| C625 | 2203-001580 | C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,2012,2MM | |
| C626 | 2203-001580 | C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,2012,2MM | |
| C627 | 2203-001608 | C-CERAMIC,CHIP;22NF,+80-20%,50V,Y5V,TP,2012,- | |
| C628 | 2203-001608 | C-CERAMIC,CHIP;22NF,+80-20%,50V,Y5V,TP,2012,- | |
| C629 | 2202-000780 | C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5 | |
| C630 | 2301-000129 | C-FILM,PEF;100NF,5%,50V,10X9X4.3X5,5MM,TP | |
| C631 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C632 | 2401-001511 | C-AL;47UF,20%,16V,GP,6X7,5,- | |
| C633 | 2401-001904 | C-AL;10UF,20%,16V,-,4X7MM,5,TP | |
| C634 | 2401-000208 | C-AL;100NF,+80-20%,5.5V,GP,12.3MM,5 | |
| C635 | 2401-000199 | C-AL;1000UF,20%,6.3V,GP,10X12.5,5MM | |
| C636 | 2401-001978 | C-AL;47UF,20%,25V,GP,6.3X5,-,TP | |
| C637 | 2401-001978 | C-AL;47UF,20%,25V,GP,6.3X5,-,TP | |
| C638 | 2401-001915 | C-AL;1UF,20%,50V,GP,3X5,1MM,TP | |
| C639 | 2401-001904 | C-AL;10UF,20%,16V,-,4X7MM,5,TP | |
| C640 | 2401-001978 | C-AL;47UF,20%,25V,GP,6.3X5,-,TP | |

| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| C641 | 2401-000753 | C-AL;220NF,20%,50V,GP,3X5,5,TP | |
| C642 | 2401-000918 | C-AL;22UF,20%,16V,GP,5X7,5,- | |
| C643 | 2401-001036 | C-AL;33.0UF,20%,16V,GP,6.3X5,5,TP | |
| C644 | A1104-0611 | C-ELEC;CE 04 -40/85 16V T 100-M SRE 3.5X5 10UF | |
| C645 | 2401-001915 | C-AL;1UF,20%,50V,GP,3X5,1MM,TP | |
| C646 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C647 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C650 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C651 | 2401-001511 | C-AL;47UF,20%,16V,GP,6X7,5,- | |
| C652 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C653 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C654 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C655 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C660 | 2203-001702 | C-CERAMIC,CHIP;2.2NF,5%,50V,X7R,TP,2012,- | |
| C661 | 2203-001702 | C-CERAMIC,CHIP;2.2NF,5%,50V,X7R,TP,2012,- | |
| C663 | 2203-000979 | C-CERAMIC,CHIP;47NF,10%,50V,X7R,2012,-,TP | |
| C681 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C682 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C698 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C6P07 | 2202-000780 | C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5 | |
| CN601 | 3710-000546 | CONNECTOR-SOCKET;20P,1R,1.5MM,ANGLE,SN | |
| CN602 | 3710-000405 | CONNECTOR-SOCKET;2P,2R,2.5MM,-, | |
| CN603 | 3711-003148 | CONNECTOR-HEADER;BOX,10P,2R,2.0MM,STRAIGHT,SN | |
| CN604 | 3711-003149 | CONNECTOR-HEADER;BOX,6P,2R,2.0MM,STRAIGHT,SN | |
| D601 | 0402-000127 | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| D602 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D603 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D604 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D605 | 0402-000127 | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| D606 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D607 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D608 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D609 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D610 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D6101 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D6102 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D6103 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D6104 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D6105 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D6106 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D611 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| IC601 | AC09-10452Y | IC-MCU;HD6433977-RA14F,1024,8,SV-A140 | |
| IC602 | AC14-12003K | IC;KA8301(N.M),-,- | |
| IC603 | 1201-000230 | IC-OP AMP;6324,DIP,14P,-,QUAD,15/100MV,P | |
| IC604 | AC14-12006C | IC;KA7533,DIP,- | |
| IC605 | 1103-001020 | IC-EEPROM;24LC04,4KX8BIT,DIP,8P,300MIL,- | |
| L601 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L602 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L603 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L604 | 2701-000131 | INDUCTOR-AXIAL;15UH,5%,2.4X3.4MM | |
| L6101 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L6103 | 2701-000117 | INDUCTOR-AXIAL;10UH,5%,2.4X3.4MM | |
| L620 | 3301-000297 | CORE-FERRITE BEAD;AA,3.6X1.2X5.7MM,1400,2900G | |
| L621 | 3301-000297 | CORE-FERRITE BEAD;AA,3.6X1.2X5.7MM,1400,2900G | |
| LD601 | 0601-000495 | LED-IR;ROUND,3MM,150MW,6V,950NM,BK | |

| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| PT601 | 0604-000188 | PHOTO-INTERRUPTER;TR,-,-,DIP-4,TR | |
| PT602 | 0604-000188 | PHOTO-INTERRUPTER;TR,-,-,DIP-4,TR | |
| Q601 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q602 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q603 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q604 | 0501-000303 | TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120 | |
| Q605 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9 | |
| Q606 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9 | |
| Q607 | 0504-000142 | TR-DIGITAL;KSR2001,PNP,300MW,4.7K-4.7K,TO | |
| Q608 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9 | |
| Q609 | AC14-12001G | IC;KA78L05,T,- | |
| Q6101 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q6102 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q6106 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q6108 | 0501-000303 | TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120 | |
| R601 | 2001-000832 | R-CARBON;510OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R602 | 2007-000804 | R-CHIP;36KOHM,5%,1/10W,DA,TP,2012 | |
| R604 | 2001-000010 | R-CARBON;68KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R606 | 2001-000568 | R-CARBON;27OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R608 | 2007-001637 | R-CHIP,MELF;1.2KOHM,5%,1/8W,DB,BK,2012 | |
| R610 | 2004-000218 | R-METAL;10KOHM,1%,1/8W,AA,TP,1.8X3.2MM | |
| R6100 | 2001-000613 | R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R6101 | 2007-001629 | R-CHIP,MELF;1.8KOHM,5%,1/8W,DB,BK,2012 | |
| R6102 | 2007-001497 | R-CHIP,MELF;5.6KOHM,5%,1/8W,DB,BK,2012 | |
| R6103 | 2007-001623 | R-CHIP,MELF;10KOHM,5%,1/8W,DB,BK,2012 | |
| R6104 | 2001-000773 | R-CARBON;470KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R6105 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R6106 | 2007-001586 | R-CHIP,MELF;1MOHM,5%,1/8W,DB,BK,2012 | |
| R6107 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| R6109 | 2001-000241 | R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R6110 | 2007-001503 | R-CHIP,MELF;47KOHM,5%,1/8W,DB,BK,2012 | |
| R6111 | 2007-001497 | R-CHIP,MELF;5.6KOHM,5%,1/8W,DB,BK,2012 | |
| R6112 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R6113 | 61048-177-333 | R-CARBON;RD 1/8 T 333-J | |
| R6114 | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R6115 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| R6116 | 2007-007166 | R-CHIP,MELF;91KOHM,5%,1/8W,DB,BK,2012 | |
| R6117 | 2001-000850 | R-CARBON;560KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R6119 | 2007-001486 | R-CHIP,MELF;56KOHM,5%,1/8W,DB,BK,2012 | |
| R612 | 2004-000218 | R-METAL;10KOHM,1%,1/8W,AA,TP,1.8X3.2MM | |
| R6120 | 2007-001586 | R-CHIP,MELF;1MOHM,5%,1/8W,DB,BK,2012 | |
| R6121 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R6122 | 2007-001623 | R-CHIP,MELF;10KOHM,5%,1/8W,DB,BK,2012 | |
| R6123 | 2007-001503 | R-CHIP,MELF;47KOHM,5%,1/8W,DB,BK,2012 | |
| R6124 | 2001-000633 | R-CARBON;30KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R6125 | 2007-001540 | R-CHIP,MELF;30KOHM,5%,1/8W,DB,BK,2012 | |
| R6128 | 2001-000534 | R-CARBON;240OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R6129 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R6131 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R6134 | 2007-001486 | R-CHIP,MELF;56KOHM,5%,1/8W,DB,BK,2012 | |
| R614 | 2007-001572 | R-CHIP,MELF;220KOHM,5%,1/8W,DB,BK,2012 | |
| R615 | 2007-001572 | R-CHIP,MELF;220KOHM,5%,1/8W,DB,BK,2012 | |
| R616 | 2001-000832 | R-CARBON;510OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R617 | 2007-001623 | R-CHIP,MELF;10KOHM,5%,1/8W,DB,BK,2012 | |
| R618 | 2007-001623 | R-CHIP,MELF;10KOHM,5%,1/8W,DB,BK,2012 | |

| Loc. No | New Part No | Description and Specification | Reamrk |
|---|---|---|---|
| R619 | 2007-001557 | R-CHIP,MELF;270OHM,5%,1/8W,DB,BK,2012 | |
| R620 | 2001-000832 | R-CARBON;510OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R621 | 61048-177-563 | R-CARBON;RD 1/8 T 563-J | |
| R624 | 2007-001627 | R-CHIP,MELF;100KOHM,5%,1/8W,DB,BK,2012 | |
| R625 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R626 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| R627 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R628 | 2007-001572 | R-CHIP,MELF;220KOHM,5%,1/8W,DB,BK,2012 | |
| R629 | 2007-001572 | R-CHIP,MELF;220KOHM,5%,1/8W,DB,BK,2012 | |
| R630 | 2001-000435 | R-CARBON;1MOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R631 | 2007-001591 | R-CHIP,MELF;18KOHM,5%,1/8W,DB,BK,2012 | |
| R632 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R633 | 2001-000802 | R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R634 | 2007-001612 | R-CHIP,MELF;12KOHM,5%,1/8W,DB,BK,2012 | |
| R635 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| R636 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R637 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R638 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R640 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R641 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R642 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R643 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R644 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R645 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R646 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R648 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| R649 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R651 | 2001-000786 | R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R652 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R653 | 61048-177-563 | R-CARBON;RD 1/8 T 563-J | |
| R654 | 61048-177-563 | R-CARBON;RD 1/8 T 563-J | |
| R655 | 2007-001557 | R-CHIP,MELF;270OHM,5%,1/8W,DB,BK,2012 | |
| R656 | 2001-000605 | R-CARBON;3.6KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R657 | 2007-001596 | R-CHIP,MELF;16KOHM,5%,1/8W,DB,BK,2012 | |
| R658 | 2007-001568 | R-CHIP,MELF;22KOHM,5%,1/8W,DB,BK,2012 | |
| R659 | 2007-001596 | R-CHIP,MELF;16KOHM,5%,1/8W,DB,BK,2012 | |
| R660 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R661 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R662 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R663 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R664 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R665 | 2001-000577 | R-CARBON;2KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R666 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R667 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R668 | 2007-001557 | R-CHIP,MELF;270OHM,5%,1/8W,DB,BK,2012 | |
| R669 | 2007-001623 | R-CHIP,MELF;10KOHM,5%,1/8W,DB,BK,2012 | |
| R670 | 2001-000435 | R-CARBON;1MOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R671 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| R672 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R673 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R674 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R675 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| R676 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R677 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R678 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |

| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| R681 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| R682 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R683 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R684 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R685 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R686 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R687 | 2007-001586 | R-CHIP,MELF;1MOHM,5%,1/8W,DB,BK,2012 | |
| R688 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R689 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R690 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| R691 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| R692 | 2001-000837 | R-CARBON;51KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R693 | 2001-000221 | R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R694 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R695 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R696 | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R697 | 2003-000259 | R-METAL OXIDE;3.9OHM,5%,2W,AE,TP,6X16MM | |
| R698 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| RS601 | 3409-000176 | SWITCH-DETECTOR;30VDC,100MA,SPST,-,- | |
| S601 | 0603-000112 | PHOTO-TR;NPN,35V,6V,50MA,75MW,- | |
| S602 | 0603-000112 | PHOTO-TR;NPN,35V,6V,50MA,75MW,- | |
| SW601 | AC34-22001E | SWITCH-PROGRAM;MXS00281MLB0,-,-,-,-,-,- | |
| XT601 | 2801-003293 | CRYSTAL-UNIT;10MHZ,50PPM,28-AAA,16PF,50OHM, | |
| XT602 | 64539-021-009 | CRYSTAL;32.768KHZ | |
| XT6102 | 2801-003311 | CRYSTAL-UNIT;17.734475MHZ,50PPM,28-AAA,16PF | |
| **AUDIO/VIDEO PARTS** | | | |
| C305 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C306 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | 4 HEAD OPTION |
| C307 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C308 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | 4 HEAD OPTION |
| C309 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C310 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | 4 HEAD OPTION |
| C311 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C312 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | 4 HEAD OPTION |
| C313 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | 4 HEAD OPTION |
| C314 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| C315 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C316 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C317 | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| C318 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C319 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C320 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C321 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C322 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C324 | B1102-0113 | C-FILM;CQ 922 P 100V 473-J CQ298PVT473J ECQV473J | |
| C325 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C326 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C327 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C328 | 2203-001620 | C-CERAMIC,CHIP MELF;27PF,5%,50V,SL,TP,2012,2MM | |
| C329 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C330 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C331 | 2401-000918 | C-AL;22UF,20%,16V,GP,5X7,5,- | |
| C332 | 2203-001524 | C-CERAMIC,CHIP;47PF,5%,50V,NPO,TP,2012,- | |
| C333 | 2203-000840 | C-CERAMIC,CHIP;390PF,5%,50V,NPO,TP,2012,- | |

| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| C335 | 2203-001580 | C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,2012,2MM | |
| C336 | 2203-001606 | C-CERAMIC,CHIP MELF;220PF,10%,50V,Y5P,TP,2012,2M | |
| C337 | 2203-000540 | C-CERAMIC,CHIP;200PF,5%,50V,NPO,TP,2012,- | |
| C338 | 2203-001589 | C-CERAMIC,CHIP MELF;18PF,5%,50V,SL,TP,2012,2MM | |
| C339 | 2203-001696 | C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,2012,2MM | |
| C340 | 2401-001965 | C-AL;470NF,20%,50V,-,4X7MM,1.5MM,BK | |
| C341 | 2401-001917 | C-AL;1UF,20%,50V,-,5X7MM,5,TP | |
| C342 | 2202-000780 | C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5 | |
| C343 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| C344 | 2401-000419 | C-AL;10UF,20%,16V,GP,5X11,5,- | |
| C345 | 2202-000780 | C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5 | |
| C346 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| C347 | 2401-000419 | C-AL;10UF,20%,16V,GP,5X11,5,- | |
| C348 | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| C349 | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| C350 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C351 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C352 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| C353 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C355 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C356 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C357 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C358 | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| C359 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- | |
| C360 | 2202-000780 | C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5 | |
| C361 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| C362 | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| C363 | 2203-001608 | C-CERAMIC,CHIP;22NF,+80-20%,50V,Y5V,TP,2012,- | |
| C364 | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| C366 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C367 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C368 | 2203-000979 | C-CERAMIC,CHIP;47NF,10%,50V,X7R,2012,-,TP | |
| C369 | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| C370 | B1102-0113 | C-FILM;CQ 922 P 100V 473-J CQ298PVT473J ECQV473J | |
| C371 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C373 | 2301-000439 | C-FILM,PEF;3NF,5%,50V,5.5X7X3MM,5MM,TP | |
| C374 | 2202-000781 | C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19, | |
| C376 | 2203-001388 | C-CERAMIC,CHIP;10NF,5%,50V,X7R,TP,2012,2.0MM | 2 HEAD OPTION |
| C377 | 2203-001388 | C-CERAMIC,CHIP;10NF,5%,50V,X7R,TP,2012,2.0MM | 2 HEAD OPTION |
| C378 | 2203-001580 | C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,2012,2MM | 4 HEAD OPTION |
| C379 | 2203-001580 | C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,2012,2MM | 4 HEAD OPTION |
| C380 | 2401-001905 | C-AL;10UF,20%,16V,BP,6X11MM,2.5MM,B | |
| C3A01 | 2401-001893 | C-AL;100UF,20%,16V,-,6.3X7MM,5,TP | |
| C3A02 | 2301-000392 | C-FILM,PEF;15NF,5%,50V,6.5X8.5X3.2MM,5MM, | AUDIO DUB. |
| | B1102-0113 | C-FILM;CQ 922 P 100V 473-J CQ298PVT473J ECQV473J | NO AUDIO DUB. |
| C3A03 | 2401-001511 | C-AL;47UF,20%,16V,GP,6X7,5,- | |
| C3A04 | 2301-000299 | C-FILM,PEF;6.8NF,5%,100V,5.8*12.5MM,5MM,T | |
| C3A05 | 2301-000161 | C-FILM,PEF;12NF,5%,50V,6.5X5.5X3.0X5,5MM, | AUDIO DUB. |
| | 2301-000264 | C-FILM,PEF;4.7NF,5%,50V,6.5X5.5X3.0X5,5MM | NO AUDIO DUB. |
| C3A06 | 2301-000408 | C-FILM,PEF;2.7NF,5%,50V,5.5X7X3MM,5MM,TP | |
| C3A07 | 2301-000402 | C-FILM,PEF;1NF,5%,50V,5X7X2.8MM,5MM,TP | |
| C3A08 | 2401-001917 | C-AL;1UF,20%,50V,-,5X7MM,5,TP | |
| C3A09 | 2401-001952 | C-AL;4.7UF,20%,50V,-,4X7MM,5,TP | |
| C3A10 | 2401-001904 | C-AL;10UF,20%,16V,-,4X7MM,5,TP | |
| C3A11 | 2401-001904 | C-AL;10UF,20%,16V,-,4X7MM,5,TP | |

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|---|---|---|---|
| C3A12 | 2301-000383 | C-FILM,PEF;10NF,5%,50V,6X7X3.2MM,5MM,TP | |
| C3A15 | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| C3A16 | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| C3A17 | 2202-000855 | C-CERAMIC,MLC-AXIAL;6.8NF,30%,16V,Y5R,TP,3.5X1.9 | |
| C3A18 | 2202-000855 | C-CERAMIC,MLC-AXIAL;6.8NF,30%,16V,Y5R,TP,3.5X1.9 | |
| C3A19 | 2202-000856 | C-CERAMIC,MLC-AXIAL;8.2NF,30%,16V,Y5R,TP,3.5X1.9 | |
| C3A20 | 2301-000217 | C-FILM,PEF;220NF,5%,50V,8.0X9.5X4.5X5,5MM | |
| C3A21 | 2401-000918 | C-AL;22UF,20%,16V,GP,5X7,5,- | |
| C3A22 | 2301-000217 | C-FILM,PEF;220NF,5%,50V,8.0X9.5X4.5X5,5MM | |
| C3A23 | 2401-001169 | C-AL;33UF,20%,16V,GP,6.3X7,2.5MM, | |
| C3A24 | 2301-000217 | C-FILM,PEF;220NF,5%,50V,8.0X9.5X4.5X5,5MM | |
| C3A25 | 2202-000780 | C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5 | |
| C3A26 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| C3A27 | 2401-001952 | C-AL;4.7UF,20%,50V,-,4X7MM,5,TP | |
| C3A28 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C3A29 | 2301-000383 | C-FILM,PEF;10NF,5%,50V,6X7X3.2MM,5MM,TP | |
| C3A30 | 2301-000392 | C-FILM,PEF;15NF,5%,50V,6.5X8.5X3.2MM,5MM, | |
| C3S05 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C3S07 | 2401-001511 | C-AL;47UF,20%,16V,GP,6X7,5,- | |
| C511 | 2401-001893 | C-AL;100UF,20%,16V,-,6.3X7MM,5,TP | |
| C531 | 2401-002183 | C-AL;220UF,0.2,16V,GP,8X9,5MM,TP | |
| C532 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C5D01 | B1102-0113 | C-FILM;CQ 922 P 100V 473-J CQ298PVT473J ECQV473J | AUDIO DUB. OPTION |
| C5D02 | 2401-001511 | C-AL;47UF,20%,16V,GP,6X7,5,- | AUDIO DUB. OPTION |
| C5D03 | 2203-001388 | C-CERAMIC,CHIP;10NF,5%,50V,X7R,TP,2012,2.0MM | AUDIO DUB. OPTION |
| C5D04 | 2301-000264 | C-FILM,PEF;4.7NF,5%,50V,6.5X5.5X3.0X5,5MM | AUDIO DUB. OPTION |
| C5D05 | 2301-000383 | C-FILM,PEF;10NF,5%,50V,6X7X3.2MM,5MM,TP | AUDIO DUB. OPTION |
| CN301 | 3708-000395 | CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,SN | |
| CN3A01 | 3708-001053 | CONNECTOR-FPC/FC/PIC;7P,1.25MM,STRAIGHT,SN | |
| CN3A02 | 3710-000404 | CONNECTOR-SOCKET;2P,2R,2.0MM,-, | |
| D301 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| FL3A01 | AC27-80100A | COIL-OSC;126QN-K5272YHC=K,-,AM | |
| FL5D01 | AC27-82001C | COIL-BIAS OSC;B02,W(TOKO)VX1850,- | AUDIO DUB. OPTION |
| IC301 | 1204-001057 | IC-SIGNAL PROCESSOR;SS11511M,QFP,80P,-,PLASTIC,7 | PAL OPTION |
| | 1204-001056 | IC-SIGNAL PROCESSOR;SS11501M,QFP,80P,-,PLASTIC,7 | MULTI OPTION |
| IC302 | AC14-12013F | IC-LINEAR;LA7416,DIP,BULK | 4 HEAD OPTION |
| | AC14-12014L | IC-LINEAR;LA7411,DIP,PRE-AMP | 2 HEAD OPTION |
| IC303 | 1209-001023 | IC-DELAY LINE;SS23377M,SOP,14P,225MIL,PLASTI | PAL OPTION |
| | 1209-001024 | IC-DELAY LINE;SS23378M,SOP,14P,225MIL,PLASTI | MULTI OPTION |
| L301 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L303 | 2701-000206 | INDUCTOR-AXIAL;56UH,5%,2.4X3.4MM | |
| L304 | 2701-000206 | INDUCTOR-AXIAL;56UH,5%,2.4X3.4MM | |
| L308 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L3A02 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L3A03 | 2702-000120 | INDUCTOR-RADIAL;15MH,5%,6.2X7.4MM | |
| L3A04 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L501 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L503 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L5D01 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | AUDIO DUB. OPTION |
| Q302 | 0501-000303 | TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120 | |
| Q303 | 0501-000303 | TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120 | |
| Q304 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q306 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9 | |
| Q307 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9 | |
| Q308 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9 | |

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|---|---|---|---|
| Q309 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q310 | 0501-000303 | TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120 | |
| Q312 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q3A01 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q3A02 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q3A03 | 0501-000010 | TR-SMALL SIGNAL;KSC1008-Y,NPN,80V,60V,700MA,80 | |
| Q3A04 | 0501-000303 | TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120 | |
| Q3A05 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q3A06 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9 | |
| Q5D01 | 0501-000010 | TR-SMALL SIGNAL;KSC1008-Y,NPN,80V,60V,700MA,80 | AUDIO DUB. OPTION |
| Q5D02 | 0504-000142 | TR-DIGITAL;KSR2001,PNP,300MW,4.7K-4.7K,TO | AUDIO DUB. OPTION |
| Q5D03 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9 | AUDIO DUB. OPTION |
| R301 | 2001-000302 | R-CARBON;10OHM,5%,1/8W,AA,TP,1.8X3.2MM | 2 HEAD OPTION |
| R302 | 2001-000302 | R-CARBON;10OHM,5%,1/8W,AA,TP,1.8X3.2MM | 2 HEAD OPTION |
| R303 | 2007-001568 | R-CHIP,MELF;22KOHM,5%,1/8W,DB,BK,2012 | |
| R304 | 2001-000522 | R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM | 4 HEAD OPTION |
| R305 | 2007-000267 | R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012 | 4 HEAD OPTION |
| | 2007-000241 | R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012 | 2 HEAD OPTION |
| R306 | 61048-177-563 | R-CARBON;RD 1/8 T 563-J | |
| R307 | 2007-001627 | R-CHIP,MELF;100KOHM,5%,1/8W,DB,BK,2012 | |
| R308 | 2007-000822 | R-CHIP;390OHM,5%,1/10W,DA,TP,2012 | 2 HEAD OPTION |
| R309 | 2007-001534 | R-CHIP,MELF;33KOHM,5%,1/8W,DB,BK,2012 | |
| R310 | 2007-001546 | R-CHIP,MELF;3.9KOHM,5%,1/8W,DB,BK,2012 | |
| R311 | 2007-000468 | R-CHIP;1KOHM,5%,1/10W,DA,TP,2012 | 4 HEAD OPTION |
| | 2007-000024 | R-CHIP;1.3KOHM,5%,1/10W,DA,TP,2012 | 2 HEAD OPTION |
| R312 | 2007-001534 | R-CHIP,MELF;33KOHM,5%,1/8W,DB,BK,2012 | |
| R313 | 2007-001513 | R-CHIP,MELF;4.7KOHM,5%,1/8W,DB,BK,2012 | |
| R314 | 2007-001557 | R-CHIP,MELF;270OHM,5%,1/8W,DB,BK,2012 | |
| R315 | 2007-001546 | R-CHIP,MELF;3.9KOHM,5%,1/8W,DB,BK,2012 | |
| R316 | 2007-001458 | R-CHIP,MELF;8.2KOHM,5%,1/8W,DB,BK,2012 | |
| R317 | 2007-001534 | R-CHIP,MELF;33KOHM,5%,1/8W,DB,BK,2012 | |
| R318 | 2007-001534 | R-CHIP,MELF;33KOHM,5%,1/8W,DB,BK,2012 | |
| R319 | 2007-001521 | R-CHIP,MELF;390OHM,5%,1/8W,DB,BK,2012 | |
| R320 | 2007-001637 | R-CHIP,MELF;1.2KOHM,5%,1/8W,DB,BK,2012 | |
| R321 | 2007-001521 | R-CHIP,MELF;390OHM,5%,1/8W,DB,BK,2012 | |
| R322 | 2001-000241 | R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R323 | 2007-001513 | R-CHIP,MELF;4.7KOHM,5%,1/8W,DB,BK,2012 | |
| R324 | 2007-001633 | R-CHIP,MELF;1.5KOHM,5%,1/8W,DB,BK,2012 | |
| R325 | 2007-001536 | R-CHIP,MELF;330OHM,5%,1/8W,DB,BK,2012 | |
| R327 | 2007-001633 | R-CHIP,MELF;1.5KOHM,5%,1/8W,DB,BK,2012 | |
| R328 | 2007-001637 | R-CHIP,MELF;1.2KOHM,5%,1/8W,DB,BK,2012 | |
| R329 | 2007-001584 | R-CHIP,MELF;2.2KOHM,5%,1/8W,DB,BK,2012 | |
| R331 | 2007-001584 | R-CHIP,MELF;2.2KOHM,5%,1/8W,DB,BK,2012 | |
| R332 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| R333 | 2007-001458 | R-CHIP,MELF;8.2KOHM,5%,1/8W,DB,BK,2012 | |
| R334 | 2007-000267 | R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012 | MULTI OPTION |
| R335 | 2007-001616 | R-CHIP,MELF;120KOHM,5%,1/8W,DB,BK,2012 | |
| R337 | 2001-000472 | R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R338 | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R339 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R340 | 2001-000449 | R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R341 | 2001-000472 | R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R350 | 2007-001629 | R-CHIP,MELF;1.8KOHM,5%,1/8W,DB,BK,2012 | |
| R351 | 2007-001616 | R-CHIP,MELF;120KOHM,5%,1/8W,DB,BK,2012 | |
| R353 | 2007-000822 | R-CHIP;390OHM,5%,1/10W,DA,TP,2012 | 2 HEAD OPTION |

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|---|---|---|---|
| R399 | 2007-001536 | R-CHIP,MELF;330OHM,5%,1/8W,DB,BK,2012 | |
| R3A02 | 2001-000405 | R-CARBON;180OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R3A03 | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R3A04 | 2007-000355 | R-CHIP;12KOHM,5%,1/10W,DA,TP,2012 | AUDIO DUB. |
| | 2007-000267 | R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012 | NO AUDIO DUB. |
| R3A05 | 2007-001584 | R-CHIP,MELF;2.2KOHM,5%,1/8W,DB,BK,2012 | |
| R3A06 | 2007-001584 | R-CHIP,MELF;2.2KOHM,5%,1/8W,DB,BK,2012 | |
| R3A07 | 2001-000458 | R-CARBON;2.2OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R3A08 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R3A09 | 2001-000522 | R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R3A10 | 2007-001633 | R-CHIP,MELF;1.5KOHM,5%,1/8W,DB,BK,2012 | |
| R3A11 | 2007-001534 | R-CHIP,MELF;33KOHM,5%,1/8W,DB,BK,2012 | |
| R3A12 | 2001-000362 | R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R3A13 | 2001-000645 | R-CARBON;330KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R3A14 | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R3A15 | 2007-001612 | R-CHIP,MELF;12KOHM,5%,1/8W,DB,BK,2012 | |
| R3A16 | 2007-001641 | R-CHIP,MELF;0OHM,5%,1/8W,DB,BK,2012 | |
| R3A17 | 2001-000802 | R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R3A19 | 2001-000221 | R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R3A20 | 2001-000786 | R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R3A21 | 2007-001503 | R-CHIP,MELF;47KOHM,5%,1/8W,DB,BK,2012 | |
| R3A22 | 2007-001503 | R-CHIP,MELF;47KOHM,5%,1/8W,DB,BK,2012 | |
| R3A23 | 2007-001484 | R-CHIP,MELF;6.2KOHM,5%,1/8W,DB,BK,2012 | |
| R3A24 | 2001-000454 | R-CARBON;2.2MOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R3A25 | 2007-001482 | R-CHIP,MELF;6.8KOHM,5%,1/8W,DB,BK,2012 | |
| R3A26 | 2007-001448 | R-CHIP,MELF;9.1KOHM,5%,1/8W,DB,BK,2012 | |
| R3A27 | 2007-001513 | R-CHIP,MELF;4.7KOHM,5%,1/8W,DB,BK,2012 | |
| R3A28 | 2007-001623 | R-CHIP,MELF;10KOHM,5%,1/8W,DB,BK,2012 | |
| R3A29 | 2007-001579 | R-CHIP,MELF;2.4KOHM,5%,1/8W,DB,TP,2012 | |
| R3A30 | 2001-000613 | R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R3A31 | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R3A32 | 2001-000904 | R-CARBON;620OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R570 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R571 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R5D01 | 2001-000793 | R-CARBON;47OHM,5%,1/8W,AA,TP,1.8X3.2MM | AUDIO DUB. OPTION |
| R5D02 | 2001-000522 | R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM | AUDIO DUB. OPTION |
| R5D03 | 2001-000745 | R-CARBON;4.7OHM,5%,1/8W,AA,TP,1.8X3.2MM | AUDIO DUB. OPTION |
| XT301 | B1280-0169 | CRYSTAL;4.433619MHZ HC-49/U-S 15PPM SERIES TYPE | |
| XT302 | 64539-012-009 | CRYSTAL;3.579545 HC/49U(8PF) TAPG | MULTI OPTION |

**IF PARTS**

| | | |
|---|---|---|
| C401 | 2203-002188 | C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2012,- |
| C402 | 2203-001388 | C-CERAMIC,CHIP;10NF,5%,50V,X7R,TP,2012,2.0MM |
| C404 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- |
| C409 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, |
| C410 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, |
| C411 | 2301-000129 | C-FILM,PEF;100NF,5%,50V,10X9X4.3X5,5MM,TP |
| C412 | 2203-000429 | C-CERAMIC,CHIP;18PF,5%,50V,NPO,2012,-,TP |
| C414 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, |
| C415 | 2301-000415 | C-FILM,PEF;22NF,5%,50V,6.5X10.5X4MM,5MM,T |
| C416 | 2401-002180 | C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP |
| C417 | 2202-000205 | C-CERAMIC,MLC-AXIAL;22PF,5%,50V,SL,1.9X3.5,-,TP |
| C418 | 2201-000837 | C-CERAMIC,DISC;39PF,5%,50V,CH,TP,5X3,5 |
| C419 | 2401-000419 | C-AL;10UF,20%,16V,GP,5X11,5,- |
| C421 | 2202-000787 | C-CERAMIC,MLC-AXIAL;10PF,5%,50V,Y5P,TP,3.5X19,- |

| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| C423 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C425 | 2401-002180 | C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP | |
| C426 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C427 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| C428 | 2203-001388 | C-CERAMIC,CHIP;10NF,5%,50V,X7R,TP,2012,2.0MM | |
| C429 | 2201-000918 | C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V,TP,6.5X3, | |
| C4A1 | 2401-000475 | C-AL;10UF,20%,50V,GP,5X11,2MM, | |
| C4A2 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C4A4 | 2301-000129 | C-FILM,PEF;100NF,5%,50V,10X9X4.3X5,5MM,TP | |
| C4A5 | 2301-000129 | C-FILM,PEF;100NF,5%,50V,10X9X4.3X5,5MM,TP | |
| C4A6 | 2301-000129 | C-FILM,PEF;100NF,5%,50V,10X9X4.3X5,5MM,TP | |
| C4A7 | 2401-001364 | C-AL;470UF,20%,16V,GP,10X12MM,5MM,TP | |
| C4A8 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C4A9 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| D410 | 0402-000127 | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| FL401 | 2904-000268 | FILTER-SAW AV;38.9MHZ,SIP5P,ST,17.6DB,PAL-D/ | |
| FL403 | 2903-000193 | FILTER-CERAMIC;BR,6.0MHz | |
| FL404 | 2903-000185 | FILTER-CERAMIC;BP,5.5MHZ,+-75KHZ,6DB,-,TP | |
| FL406 | B1243-0045 | FILTER-CERAMIC;SP 6.5M SFE6.5MB TAPG | |
| FL407 | 2903-000178 | FILTER-CERAMIC;BP,5.5MHZ,-,-,-,TP | |
| FL408 | 2903-000199 | FILTER-CERAMIC;TR,6.5MHZ,70KHZ,-,-,TP | |
| IC401 | AC14-12011Q | IC-LINEAR;TDA9800,DIP,NEG DEMOD | |
| IC4A1 | AC14-12003P | IC;LA7920,-,- | |
| IC4A2 | AC14-12003T | IC-L;KA33V TAPG,-,- | |
| L401 | 2701-000145 | INDUCTOR-AXIAL;1UH,5%,2.4X3.4MM | |
| L402 | 2701-000145 | INDUCTOR-AXIAL;1UH,5%,2.4X3.4MM | |
| L403 | 2701-000181 | INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM | |
| L404 | 2701-000160 | INDUCTOR-AXIAL;22UH,5%,2.4X3.4MM | |
| L405 | 2702-000185 | INDUCTOR-RADIAL;8.2UH,5%,6X6.4MM | |
| L4A1 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| Q401 | 0501-000436 | TR-SMALL SIGNAL;KTC3197-AT,NPN,625MW,TO-92,TP, | |
| Q402 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| Q4A1 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| R402 | 2001-000802 | R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R403 | 2007-001637 | R-CHIP,MELF;1.2KOHM,5%,1/8W,DB,BK,2012 | |
| R404 | 2007-001488 | R-CHIP,MELF;560OHM,5%,1/8W,DB,BK,2012 | |
| R405 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R406 | 2001-000554 | R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R410 | 2001-000857 | R-CARBON;560OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R414 | 2007-001578 | R-CHIP,MELF;2.7KOHM,5%,1/8W,DB,BK,2012 | |
| R415 | 2001-000003 | R-CARBON;330OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R416 | 2001-000362 | R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R417 | 2001-000515 | R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R418 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R419 | 2001-000449 | R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R420 | 2007-001505 | R-CHIP,MELF;470OHM,5%,1/8W,DB,BK,2012 | |
| R421 | 2007-001536 | R-CHIP,MELF;330OHM,5%,1/8W,DB,BK,2012 | |
| R423 | 2007-001536 | R-CHIP,MELF;330OHM,5%,1/8W,DB,BK,2012 | |
| R424 | 2007-001574 | R-CHIP,MELF;20KOHM,5%,1/8W,DB,BK,2012 | |
| R425 | 2007-001503 | R-CHIP,MELF;47KOHM,5%,1/8W,DB,BK,2012 | |
| R426 | 2007-000766 | R-CHIP;330OHM,5%,1/10W,DA,TP,2012 | |
| R428 | 2007-001568 | R-CHIP,MELF;22KOHM,5%,1/8W,DB,BK,2012 | |
| R429 | 2007-001568 | R-CHIP,MELF;22KOHM,5%,1/8W,DB,BK,2012 | |
| R432 | 2001-000793 | R-CARBON;47OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R435 | 2007-001513 | R-CHIP,MELF;4.7KOHM,5%,1/8W,DB,BK,2012 | |

| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| R436 | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R4A0 | 2001-000595 | R-CARBON;3.3MOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R4A1 | 2007-001623 | R-CHIP,MELF;10KOHM,5%,1/8W,DB,BK,2012 | |
| R4A2 | 2001-000718 | R-CARBON;4.3KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R4A3 | 2007-001568 | R-CHIP,MELF;22KOHM,5%,1/8W,DB,BK,2012 | |
| R4A4 | 2007-001641 | R-CHIP,MELF;0OHM,5%,1/8W,DB,BK,2012 | |
| R4A5 | 2007-001555 | R-CHIP,MELF;27KOHM,5%,1/8W,DB,BK,2012 | |
| R4A6 | 2007-001555 | R-CHIP,MELF;27KOHM,5%,1/8W,DB,BK,2012 | |
| R4A7 | 2007-001555 | R-CHIP,MELF;27KOHM,5%,1/8W,DB,BK,2012 | |
| R4A8 | 2001-000595 | R-CARBON;3.3MOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R4A9 | 2001-000595 | R-CARBON;3.3MOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R4B1 | 2007-001568 | R-CHIP,MELF;22KOHM,5%,1/8W,DB,BK,2012 | |
| R4B2 | 2007-001568 | R-CHIP,MELF;22KOHM,5%,1/8W,DB,BK,2012 | |
| TL401 | AC26-12001A | TRANS-DET;9MM,0UH,BLK,8PF,77.9MHZ,M7T1,S | |
| U401 | AC40-30070P | TM-BLOCK;TCRK9600VD04A,PAL-G/K(HYPER),1 | PAL OPTION |
| | AC40-30070E | TM-BLOCK;MTSH6HD32,PAL-G/K(HYPER),108 | MULTI OPTION |
| VR401 | 2103-000307 | VR-SEMI;22KOHM,30%,1/10W,TOP | |
| W109 | 2701-000117 | INDUCTOR-AXIAL;10UH,5%,2.4X3.4MM | |
| **I/O PARTS** | | | |
| C802 | 2401-001904 | C-AL;10UF,20%,16V,-,4X7MM,5,TP | |
| C804 | 2401-001904 | C-AL;10UF,20%,16V,-,4X7MM,5,TP | |
| C806 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| C807 | 2203-001557 | C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,2012, | |
| C818 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| C819 | 2202-000780 | C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5 | |
| C820 | 2401-001511 | C-AL;47UF,20%,16V,GP,6X7,5,- | |
| C822 | 2401-001895 | C-AL;100UF,20%,16V,GP,6.3X11MM,2.5M | |
| C824 | 2203-001696 | C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,2012,2MM | |
| C825 | 2203-001696 | C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,2012,2MM | |
| C829 | 2401-000918 | C-AL;22UF,20%,16V,GP,5X7,5,- | |
| C831 | 2203-001615 | C-CERAMIC,CHIP MELF;270PF,10%,50V,Y5P,TP,2012,2M | |
| C834 | 2203-001615 | C-CERAMIC,CHIP MELF;270PF,10%,50V,Y5P,TP,2012,2M | |
| C838 | 2401-000918 | C-AL;22UF,20%,16V,GP,5X7,5,- | |
| C839 | 2401-000918 | C-AL;22UF,20%,16V,GP,5X7,5,- | |
| D801 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D802 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D803 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D804 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D805 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D816 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| J805 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| JC802 | AC37-20001C | JACK-RCA;DPAM-9113,4P,MONO,PI3.3 | |
| L801 | 2701-000181 | INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM | |
| L815 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L816 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L821 | 2701-000181 | INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM | |
| Q802 | 0501-000303 | TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120 | |
| Q803 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,TO-92,TP,12 | |
| R807 | 2007-001446 | R-CHIP,MELF;910OHM,5%,1/8W,DB,BK,2012 | |
| R808 | 2007-001505 | R-CHIP,MELF;470OHM,5%,1/8W,DB,BK,2012 | |
| R809 | 2001-000995 | R-CARBON;820OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R810 | 2001-000449 | R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R811 | 2007-001505 | R-CHIP,MELF;470OHM,5%,1/8W,DB,BK,2012 | |
| R812 | 2007-001460 | R-CHIP,MELF;75OHM,5%,1/8W,DB,BK,2012 | |

| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| R813 | 2007-001460 | R-CHIP,MELF;75OHM,5%,1/8W,DB,BK,2012 | |
| R814 | 2007-001464 | R-CHIP,MELF;750OHM,5%,1/8W,DB,BK,2012 | |
| R821 | 2007-001572 | R-CHIP,MELF;220KOHM,5%,1/8W,DB,BK,2012 | |
| R851 | 2007-001589 | R-CHIP,MELF;1KOHM,5%,1/8W,DB,BK,2012 | |
| SW801 | 3408-000127 | SWITCH-SLIDE;12V,100MA,-,- | |
| **670** | **DO NOT ORDER** | **ASSY-F/TIMER** | **(S.N.A)** |
| C701 | 2401-001893 | C-AL;100UF,20%,16V,-,6.3X7MM,5,TP | |
| C702 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C703 | 2202-000796 | C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P,TP,3.5X19,- | |
| C704 | 2401-001952 | C-AL;4.7UF,20%,50V,-,4X7MM,5,TP | |
| C705 | 2401-001893 | C-AL;100UF,20%,16V,-,6.3X7MM,5,TP | |
| C706 | 2202-000807 | C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25V,Y5V,TP,3.5X | |
| C707 | 2202-000243 | C-CERAMIC,MLC-AXIAL;33PF,5%,50V,SL,3.5X19,-,TP | |
| C708 | 2202-000279 | C-CERAMIC,MLC-AXIAL;47PF,5%,50V,SL,3.5X19,-,TP | |
| C709 | 2202-000279 | C-CERAMIC,MLC-AXIAL;47PF,5%,50V,SL,3.5X19,-,TP | |
| C710 | 2202-000279 | C-CERAMIC,MLC-AXIAL;47PF,5%,50V,SL,3.5X19,-,TP | |
| C711 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,- | |
| C712 | 2202-000850 | C-CERAMIC,MLC-AXIAL;2.2NF,30%,16V,Y5R,TP,3.5X1.9 | |
| C714 | 2401-001904 | C-AL;10UF,20%,16V,-,4X7MM,5,TP | |
| CN701 | 3710-000545 | CONNECTOR-SOCKET;20P,1R,1.5MM,STRAIGHT,SN | |
| D706 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | FRONT A/V OPTION |
| D710 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D711 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | SP/LP OPTION |
| D712 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | 4 HEAD OPTION |
| D718 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D720 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | MULTI OPTION |
| D722 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | PAL OPTION |
| D723 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | SIMULCAST OPTION |
| D727 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D728 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D729 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D730 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | MULTI SOUND 1 OPTION |
| D731 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | MULTI SOUND 2 OPTION |
| D736 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D737 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D738 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D739 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D741 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D742 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D743 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D744 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D745 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| D746 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS,DO | |
| DT701 | AC07-20050J | VF-DISPLAY;SVV-8MS11,15SEG,101.5X21.5,- | |
| IC701 | 1003-001039 | IC-VFD;UPD16311GC-AB6,QFP,52P,-,-,-40 | |
| JK702 | AC37-22001T | JACK-PIN;DSPS-8805-03W,PI4,3P,GLD,- | |
| JK703 | 3722-000433 | JACK-PIN;1P/1C,PI3.3,SN,YEL,- | |
| JS701 | 3406-001015 | SWITCH-ROTARY;5V,10MA,DP5T,9.1MM | SHUTTLE OPTION |
| L701 | AC27-92001B | COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,- | |
| L703 | 2701-000181 | INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM | |
| LD701 | 0601-000497 | LED;ROUND,GRN,3MM,565NM | |
| Q701 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9 | |
| R701 | 2004-000292 | R-METAL;12OHM,5%,1/4W,AA,TP,2.4X6.4MM | |
| R702 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |

| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| R703 | 2004-000790 | R-METAL;330OHM,5%,1/4W,AA,TP,2.4X6.4MM | |
| R704 | 2001-000969 | R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R705 | 2004-000292 | R-METAL;12OHM,5%,1/4W,AA,TP,2.4X6.4MM | |
| R706 | 2001-000273 | R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M | SHUTTLE OPTION |
| R707 | 2001-000273 | R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M | SHUTTLE OPTION |
| R708 | 2001-000273 | R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M | SHUTTLE OPTION |
| R709 | 2001-000273 | R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M | SHUTTLE OPTION |
| R711 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | SHUTTLE OPTION |
| R712 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | SHUTTLE OPTION |
| R713 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | SHUTTLE OPTION |
| R714 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | SHUTTLE OPTION |
| R716 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R717 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R718 | 61048-177-333 | R-CARBON;RD 1/8 T 333-J | |
| R719 | 61048-177-333 | R-CARBON;RD 1/8 T 333-J | |
| R720 | 2001-000325 | R-CARBON;120OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R721 | 61048-177-563 | R-CARBON;RD 1/8 T 563-J | |
| R722 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R726 | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R727 | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R728 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R729 | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| R730 | 61048-177-333 | R-CARBON;RD 1/8 T 333-J | |
| R731 | 61048-177-333 | R-CARBON;RD 1/8 T 333-J | |
| R732 | 2001-000633 | R-CARBON;30KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R733 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| R734 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| RM701 | AC59-62001G | MODULE-REMOCON;TFMR5380,38KHZ,-,-,-,- | |
| SW701 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | |
| SW703 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | |
| SW704 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | |
| SW705 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | |
| SW706 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | SP/LP OPTION |
| SW707 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | |
| SW709 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | |
| SW710 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | |
| SW711 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | |
| SW712 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | |
| SW713 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | F.F OPTION |
| SW714 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | REW OPTION |
| SW715 | 3404-001008 | SWITCH-TACT;12V,20MA,160+-50,6X7.9X3.5MM,D | |
| ZD701 | 62169-403-833 | DIODE ZENER;UZ 5.6BH | |
| ZD702 | 0403-000555 | DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500MW, | |
| | | **REMOCON-ASSY** | |
| | AC59-10329G | SV-A20G/A40G/A60G/A80G/SVR-200/205/400/405 | |
| | AC59-10329N | SV-A30G/ZAMA,TSE | |
| | AC59-10329M | SV-A40G/A80G/ZAMA,TSE | |
| | 64043-0166-00 | DOOR-BATTERY;ABS94HB T2 D/GRY NR-3346 | |
| CT1 | 2401-001471 | C-AL;47UF,20%,10V,GP,5X11,2.5MM, | |
| CT2 | 2203-000199 | C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,TP,2012, | |
| ICT01 | AC09-10453K | IC-MCU;Z86L7608,A160,28P,QFP,A120U,8B | |
| LDT1 | A4150-0168 | LED-INFRARED;SI5312-H NTR 940NM/1.4V | |
| QT1 | 0501-000592 | TR-SMALL SIGNAL;2SD1781K-QR,NPN,200MW,SOT-23,T | |

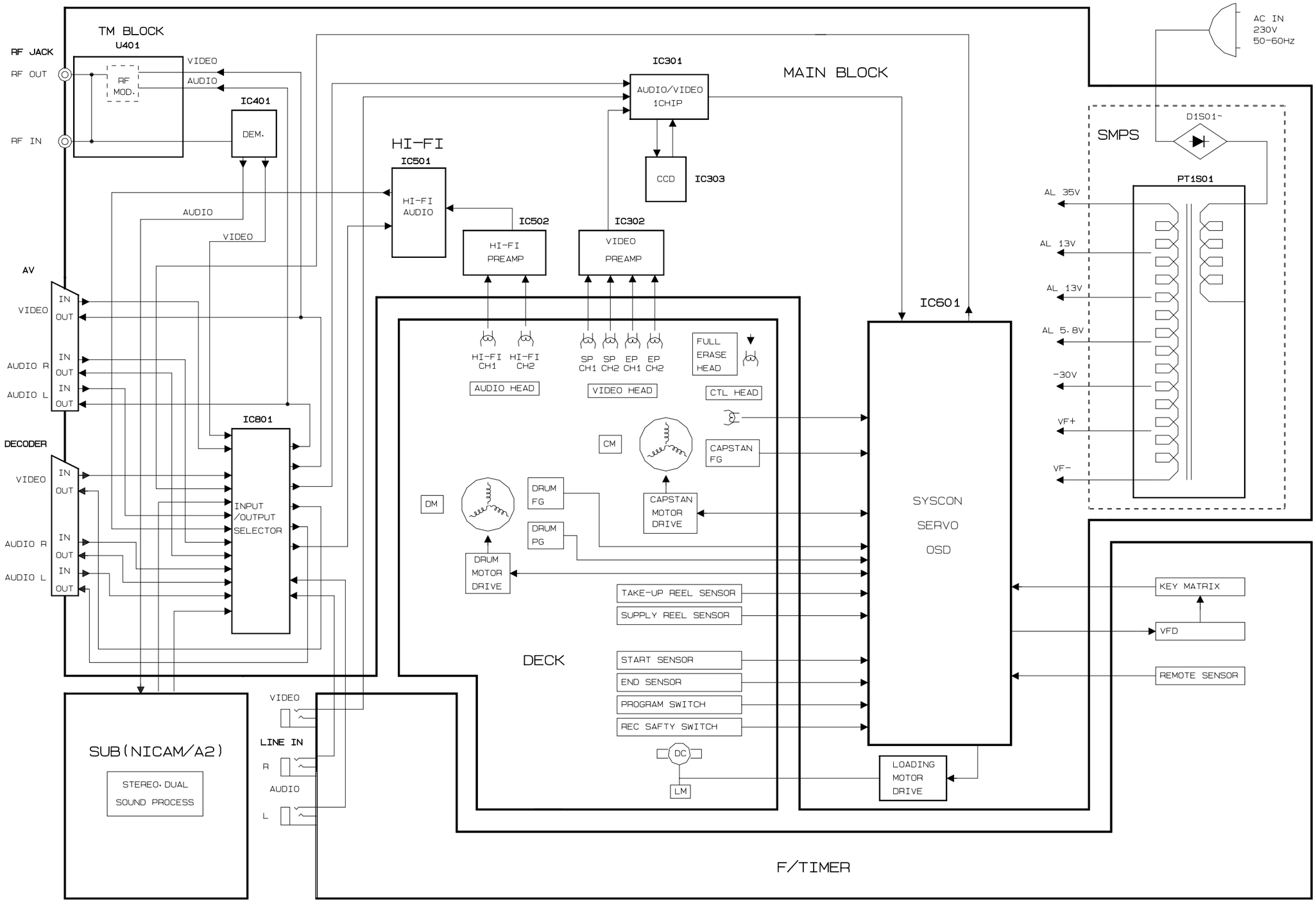
| Loc. No | New Part No | Description and Specification | Remark |
|---|---|---|---|
| RT1 | 2007-000483 | R-CHIP;1OHM,5%,1/10W,DA,TP,2012 | |
| RT2 | 2007-000593 | R-CHIP;22OHM,5%,1/10W,DA,TP,2012 | |
| XT1 | B1283-0036 | RESONATOR-CERAMIC;8MHZ EFOEC8004T4 3/CN J TAPG | |

**Note :** ASS'Y REMOCON is only SV-A20G/40G/60G/80G, SVR-200/205/400/405 and SV-30G/40G/80G/ZAMA, TSE.
Please, refer to the separate information for the other models combind.

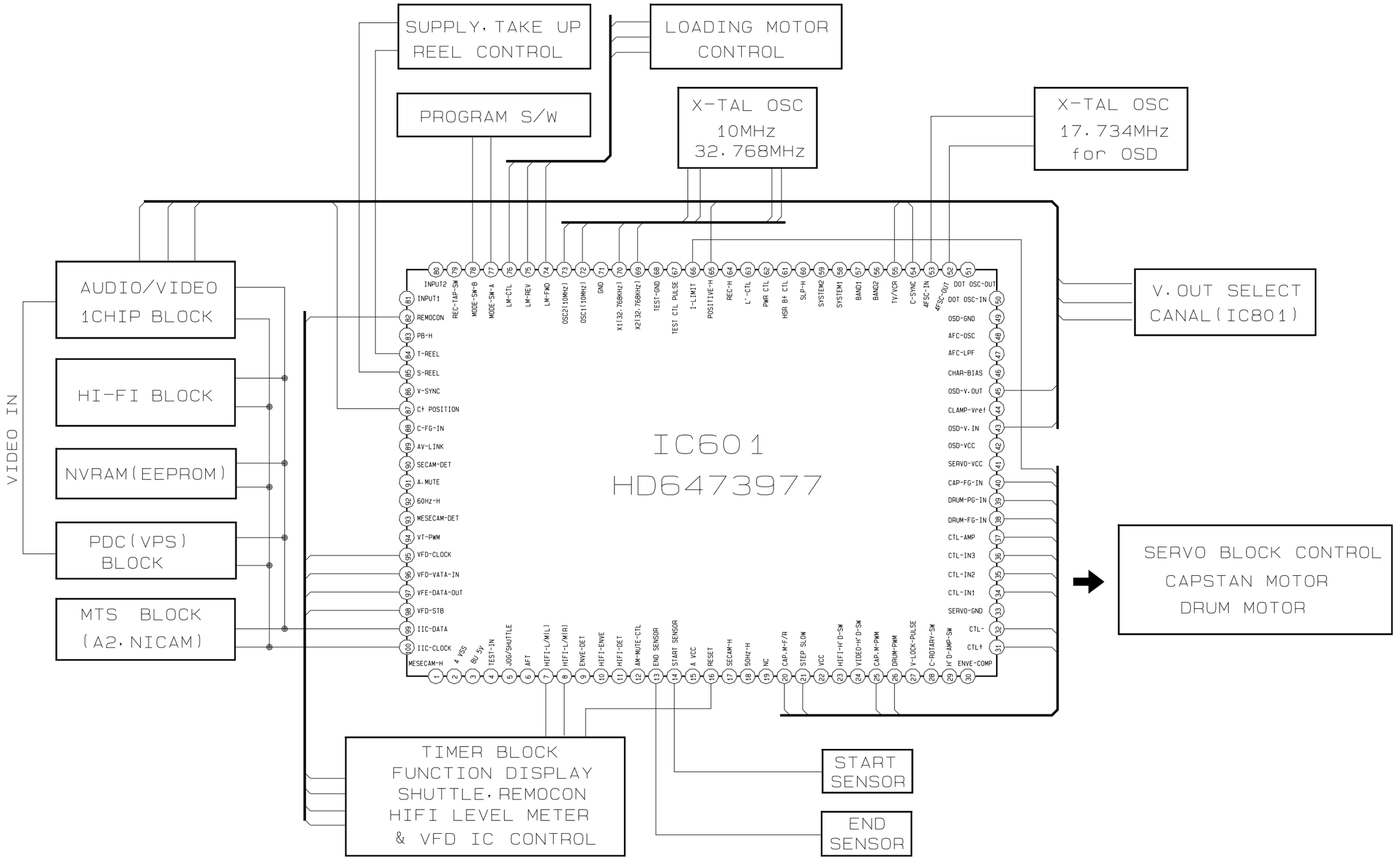
# 8. Block Diagrams


| | | Page |
|---|---|---|
| 8-1 | Overall Block Diagram | 8-2 |
| 8-2 | System Control | 8-3 |
| 8-3 | Video | 8-4 |

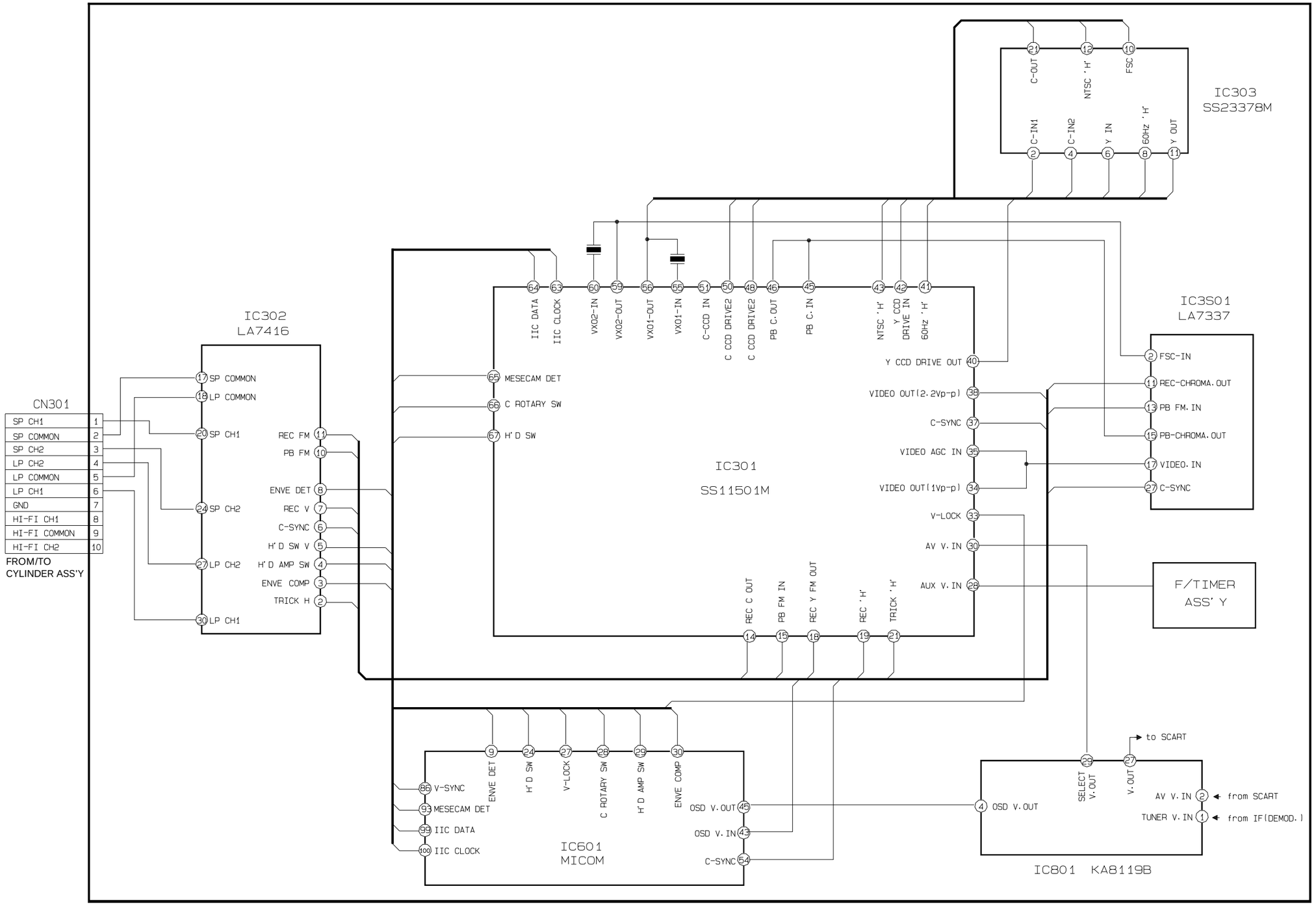
## 8-1 Overall Block Diagram



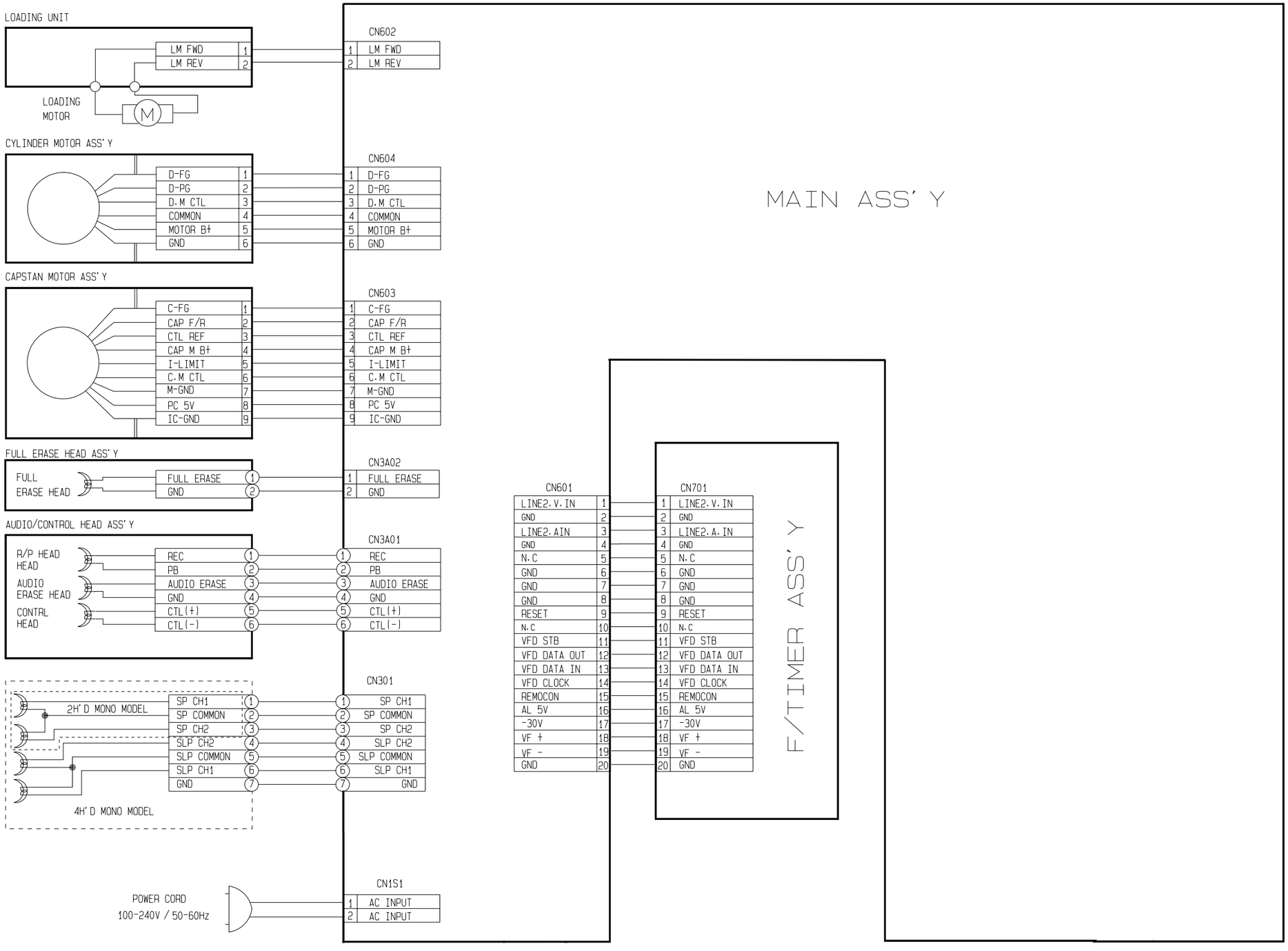
## 8-2 System Control



## 8-3 Video


IC303
SS23378M
C-OUT
NTSC 'H'
FSC
C-IN1
C-IN2
Y IN
60Hz 'H'
Y OUT
IC302
LA7416
IC3S01
LA7337
IC301
SS11501M
IIC DATA
IIC CLOCK
VXO2-IN
VXO2-OUT
VXO1-OUT
VXO1-IN
C-CCD IN
C CCD DRIVE2
C CCD DRIVE2
PB C.OUT
PB C.IN
NTSC 'H'
Y CCD DRIVE IN
60Hz 'H'
MESECAM DET
C ROTARY SW
H'D SW
Y CCD DRIVE OUT
VIDEO OUT(2.2Vp-p)
C-SYNC
VIDEO AGC IN
VIDEO OUT(1Vp-p)
V-LOCK
AV V.IN
AUX V.IN
FSC-IN
REC-CHROMA.OUT
PB FM.IN
PB-CHROMA.OUT
VIDEO.IN
C-SYNC
CN301
SP CH1
SP COMMON
SP CH2
LP CH2
LP COMMON
LP CH1
GND
HI-FI CH1
HI-FI COMMON
HI-FI CH2
FROM/TO
CYLINDER ASS'Y
SP COMMON
LP COMMON
SP CH1
SP CH2
LP CH2
LP CH1
REC FM
PB FM
ENVE DET
REC V
C-SYNC
H'D SW V
H'D AMP SW
ENVE COMP
TRICK H
REC C OUT
PB FM IN
REC Y FM OUT
REC 'H'
TRICK 'H'
F/TIMER
ASS'Y
IC601
MICOM
V-SYNC
MESECAM DET
IIC DATA
IIC CLOCK
ENVE DET
H'D SW
V-LOCK
C ROTARY SW
H'D AMP SW
ENVE COMP
OSD V.OUT
OSD V.IN
C-SYNC
IC801 KA8119B
SELECT V.OUT
V.OUT
to SCART
AV V.IN
TUNER V.IN
from SCART
from IF(DEMOD.)

# 10. Wiring Diagram



# 11. Schematic Diagrams


Page

◆ Block Identification of Main PCB - - - - - - - - - - - - - - - 11-2

11-1 S.M.P.S/Power - - - - - - - - - - - - - - - - - - - - - - - - - - 11-3

11-2 System Control/Servo - - - - - - - - - - - - - - - - - - - - 11-4

11-3 Audio/Video(2 Heads) - - - - - - - - - - - - - - - - - - - - 11-5

11-4 Audio/Video(4 Heads) - - - - - - - - - - - - - - - - - - - - 11-6

11-5 Audio/Video(2 Heads Multi) - - - - - - - - - - - - - - - - 11-7

11-6 Audio/Video(4 Heads Multi) - - - - - - - - - - - - - - - - 11-8

11-7 IF - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 11-9

11-8 I/O - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 11-10

11-9 Function-Timer(SV-A20G/A30G/A60G/SVR-200/400) - - - - - 11-11

11-10 Function-Timer (SV-A40G/A80G/SVR-205/405) - - - - - - - 11-12

11-11 Remote-Control - - - - - - - - - - - - - - - - - - - - - - - - 11-13

**Note**

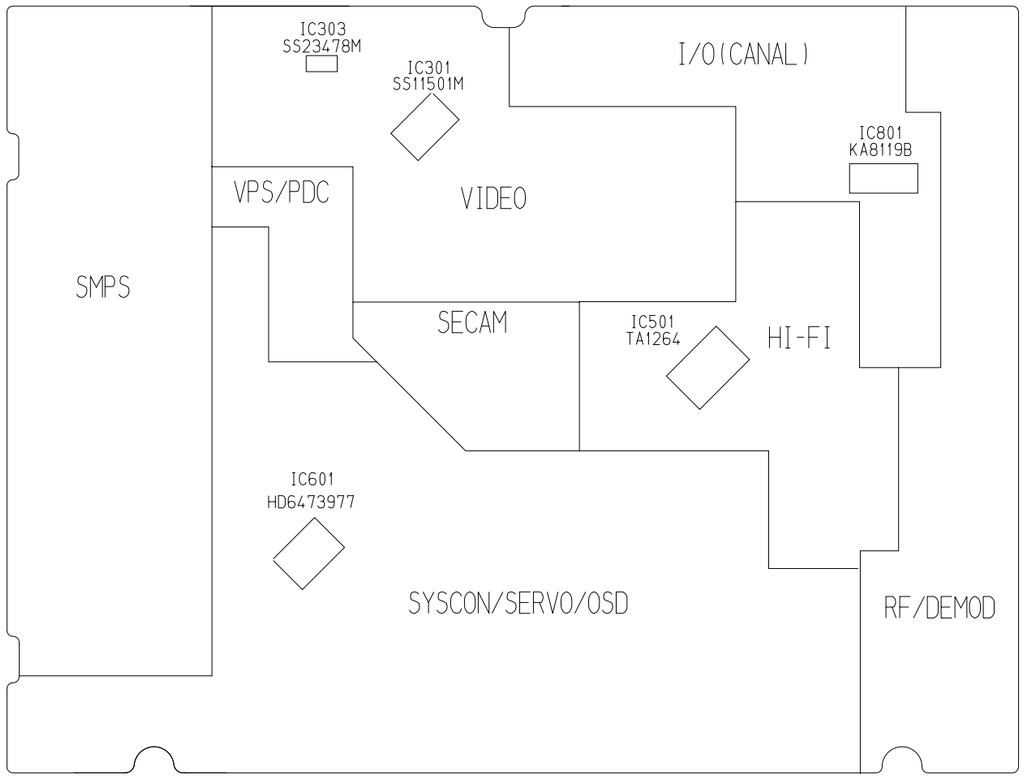
For schematic Diagram
- Resistors are in ohms, 1/8W unless otherwise noted.
- Circled numbers refer to waveforms.

**Special note :**
Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the “electrostatically sensitive (ES) devices” section of this service manual.

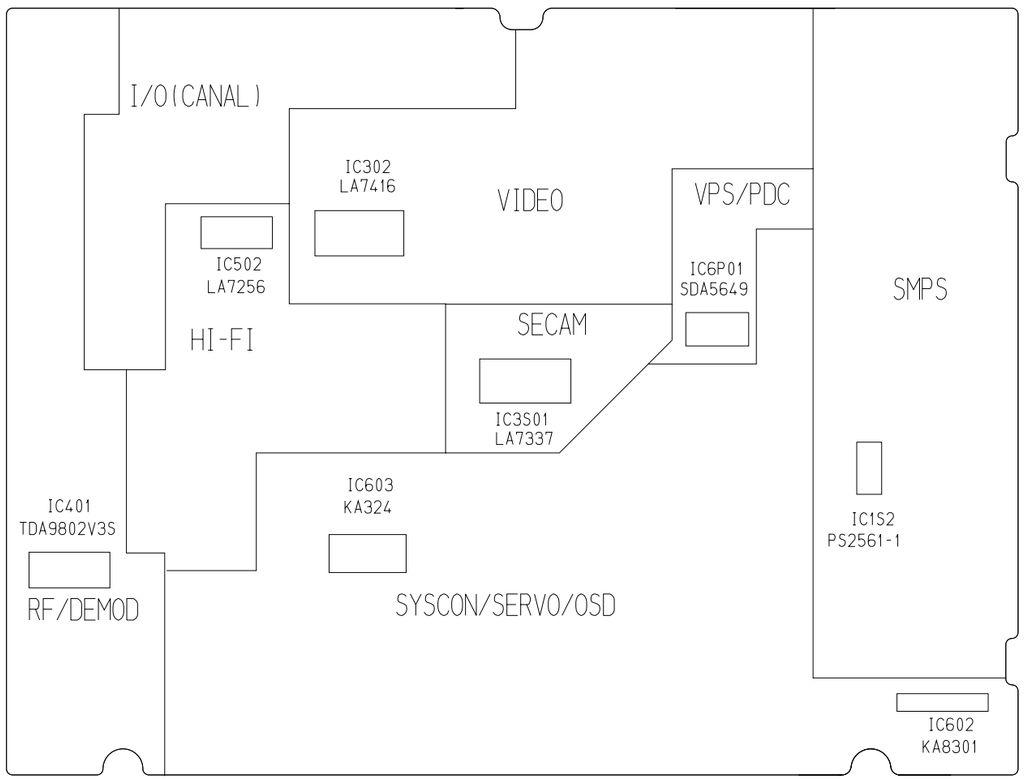
**Note :**
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

**Important safety notices :**
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components. Use only the same type.

## ◆ Block Identification of Main PCB

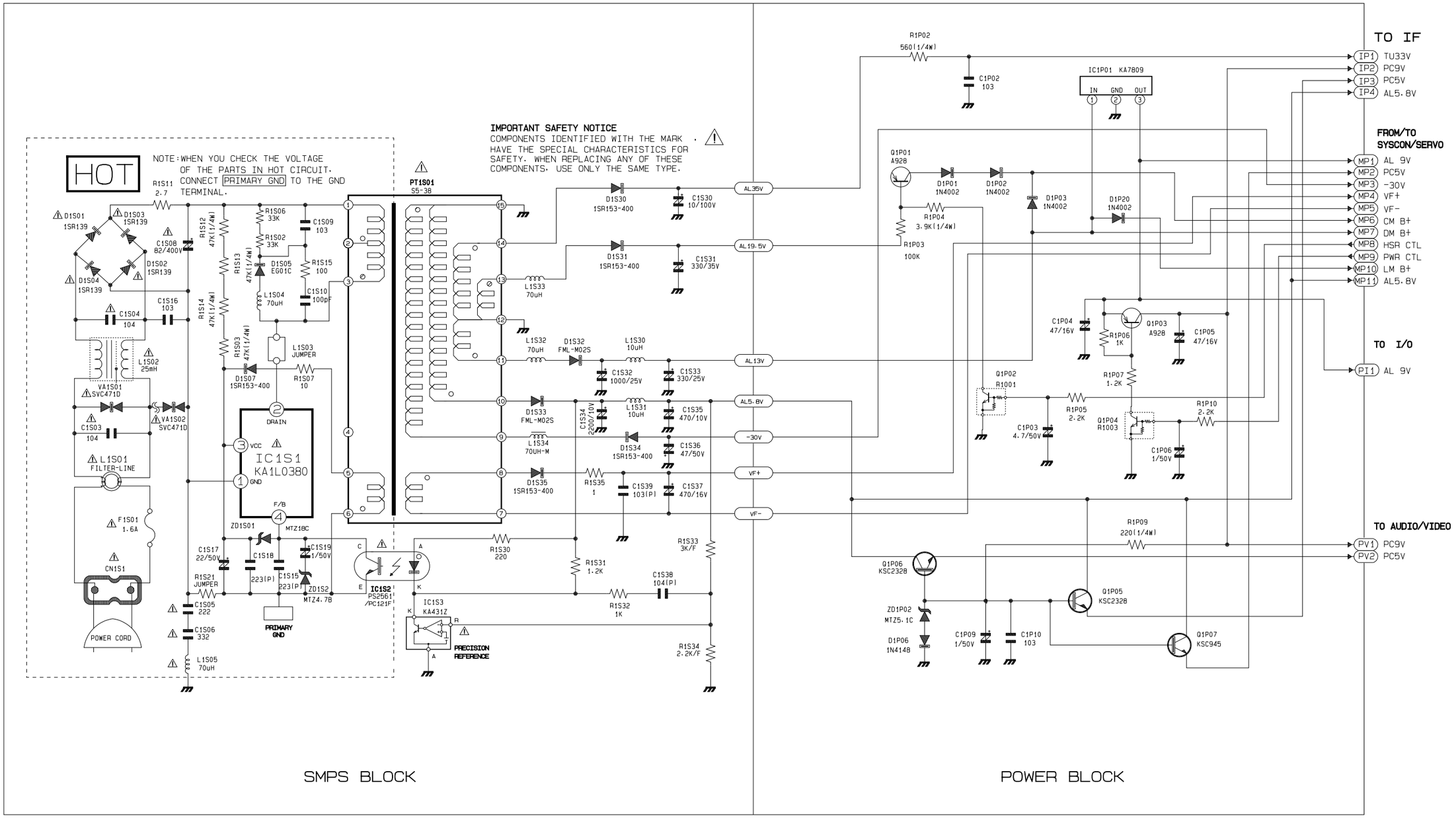



(Component Side)

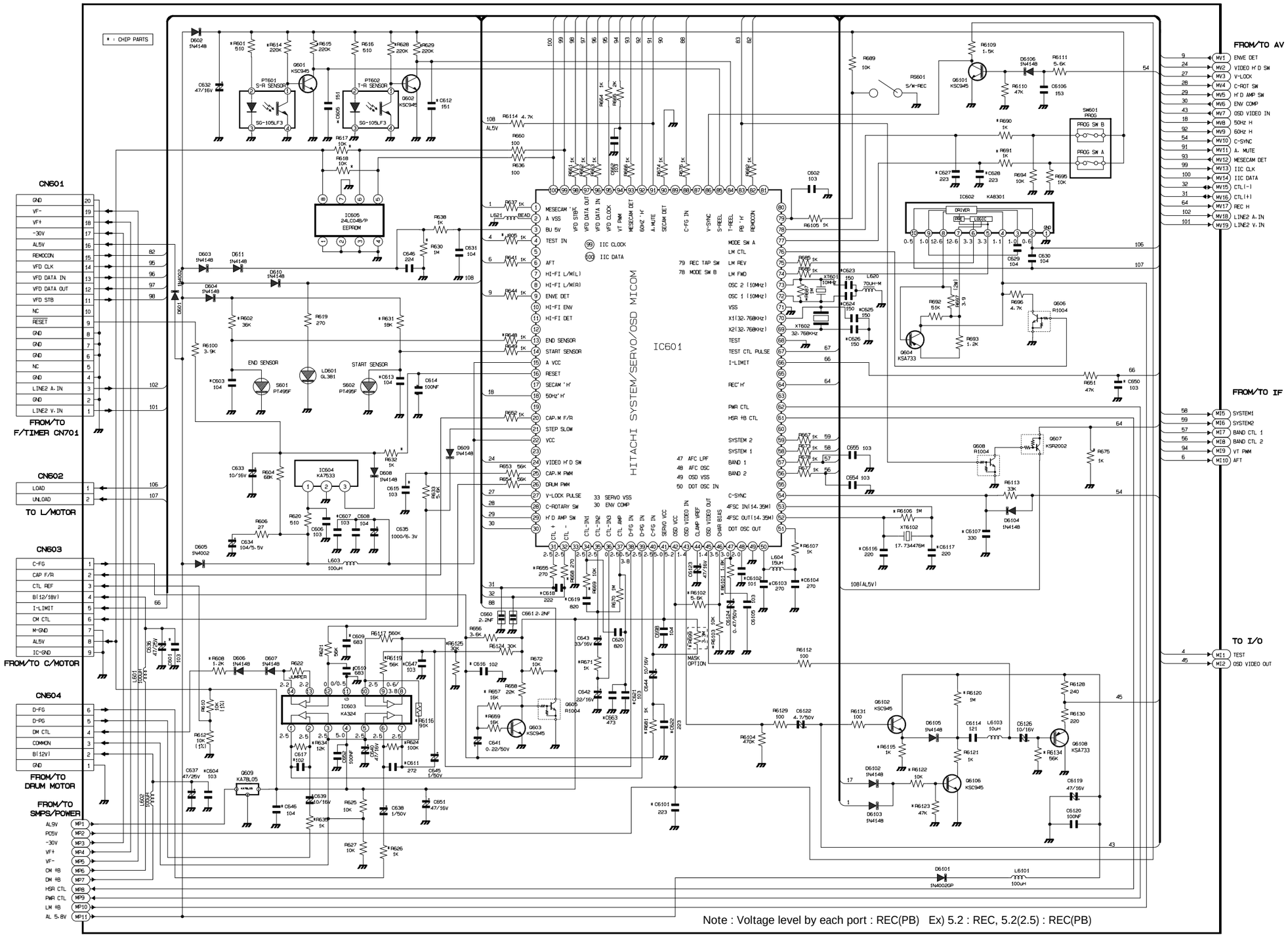



(Conductor Side)

## 11-1 S.M.P.S/POWER

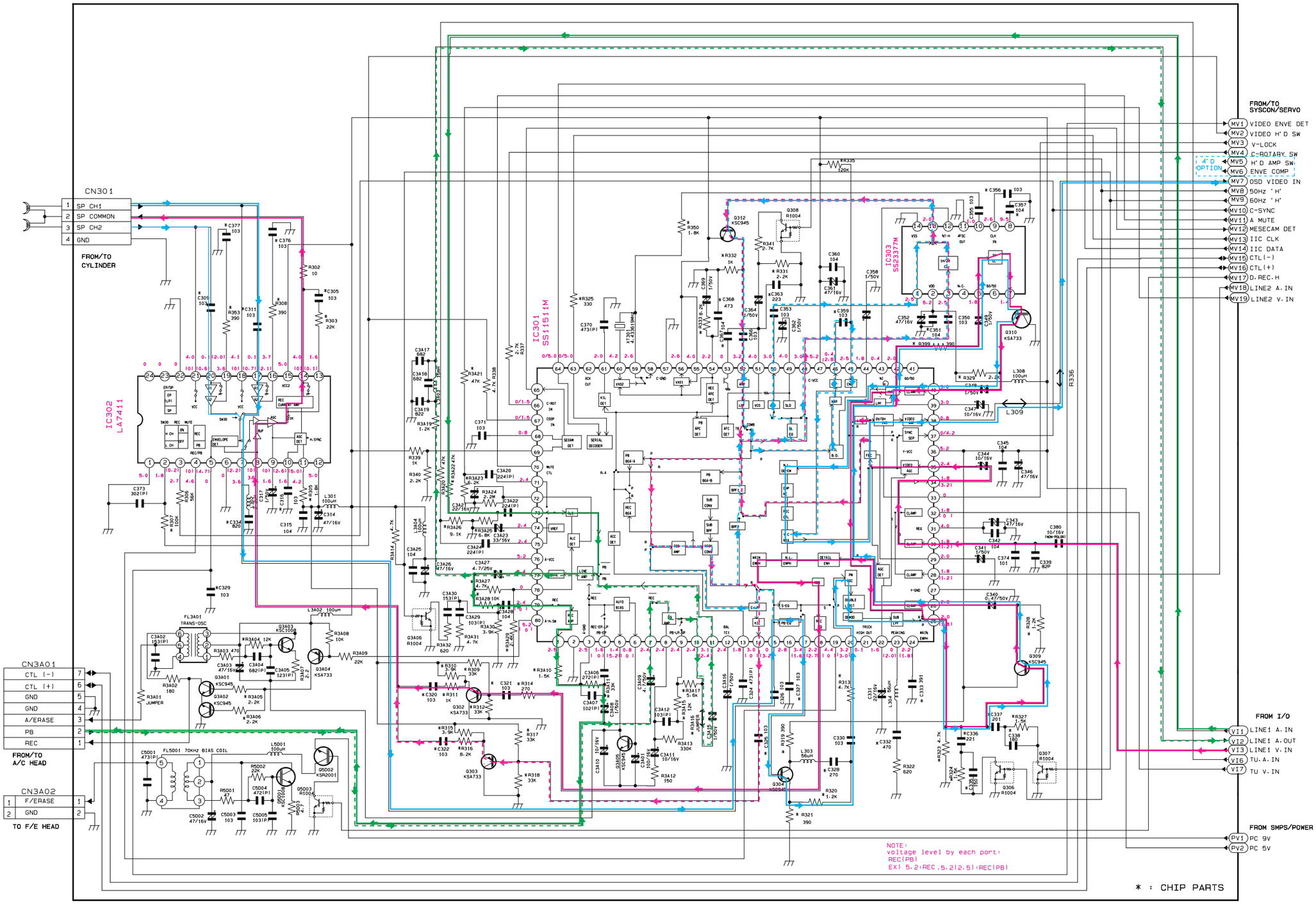


# 11-2 System Control/Servo



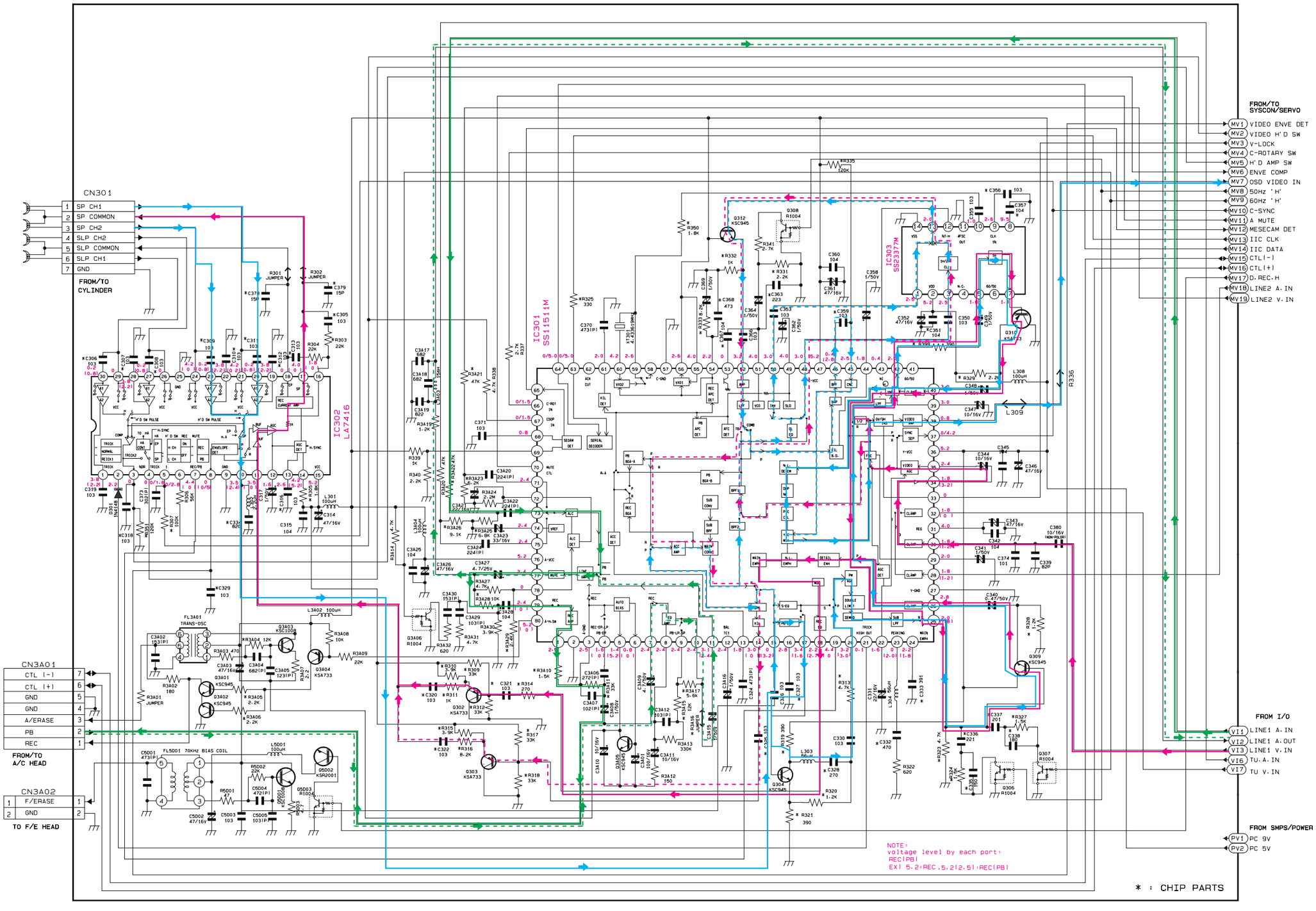
# 11-3 Audio/Video(2 Heads)

REC Y PROCESS
REC C PROCESS
PB Y PROCESS
PB C PROCESS
REC LINEAR AUDIO
PB LINEAR AUDIO



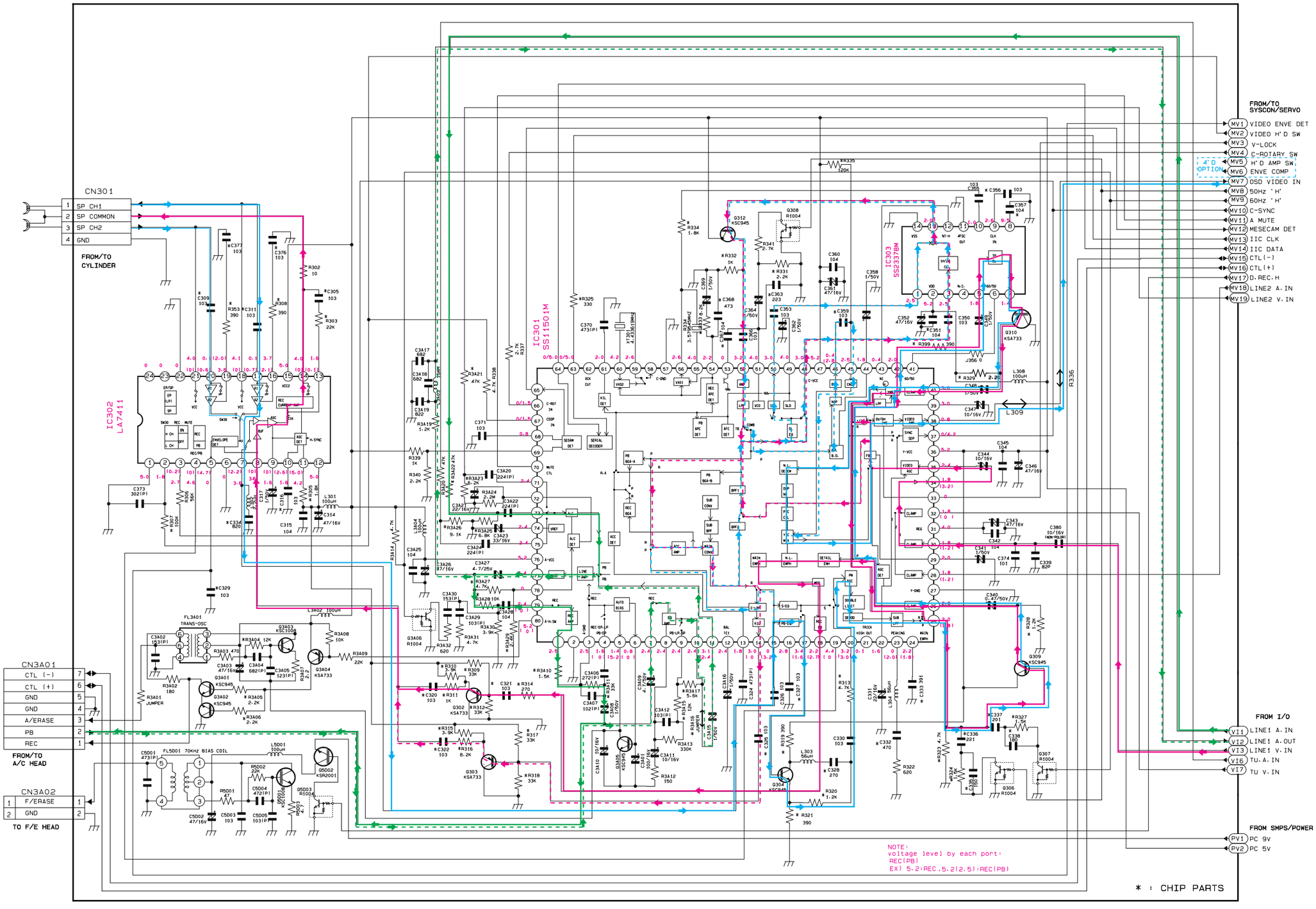
# 11-4 Audio/Video(4 Heads)

REC Y PROCESS
REC C PROCESS
PB Y PROCESS
PB C PROCESS
REC LINEAR AUDIO
PB LINEAR AUDIO



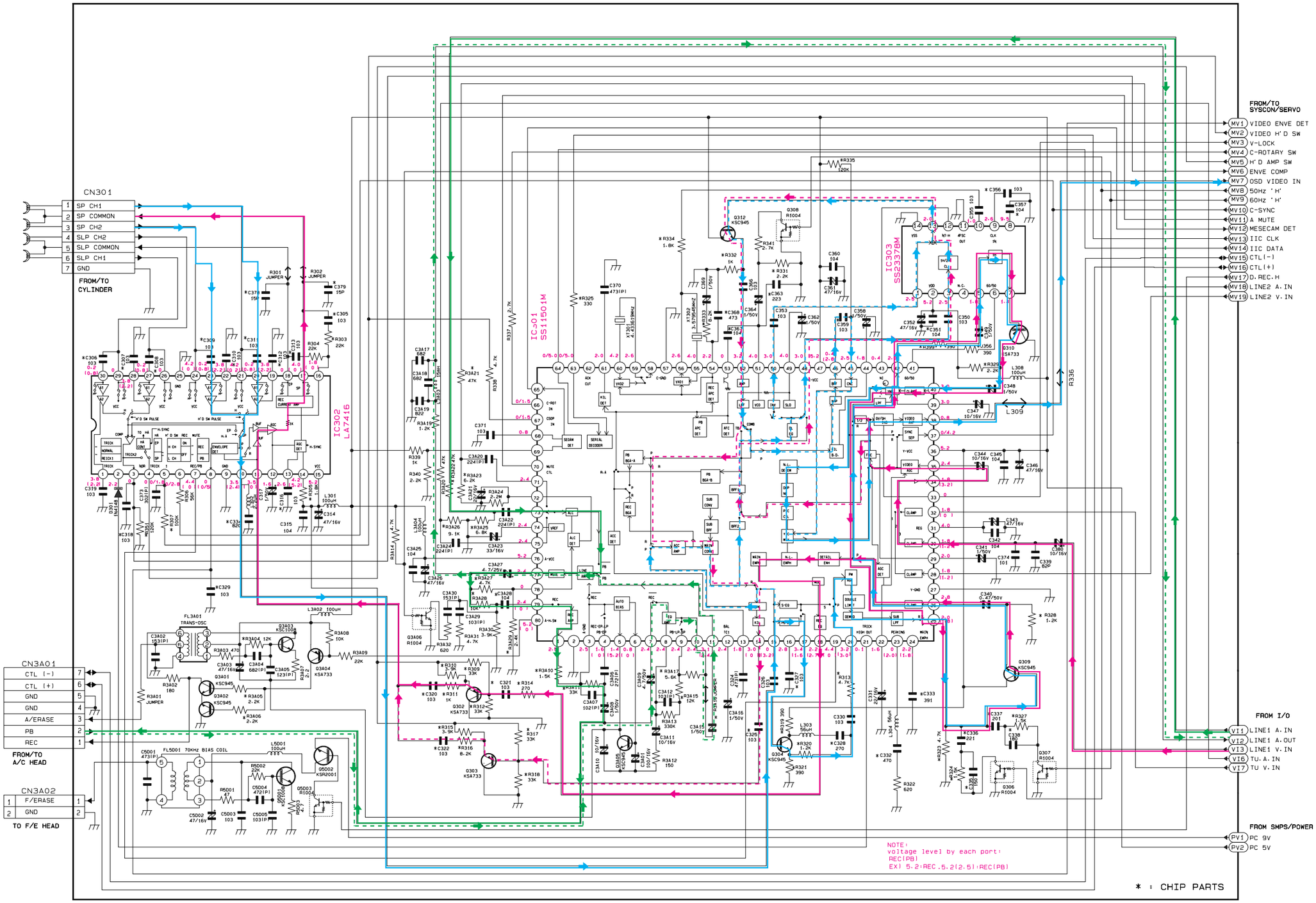
## 11-5 Audio/Video(2 Heads Multi)

REC Y PROCESS
REC C PROCESS
PB Y PROCESS
PB C PROCESS
REC LINEAR AUDIO
PB LINEAR AUDIO

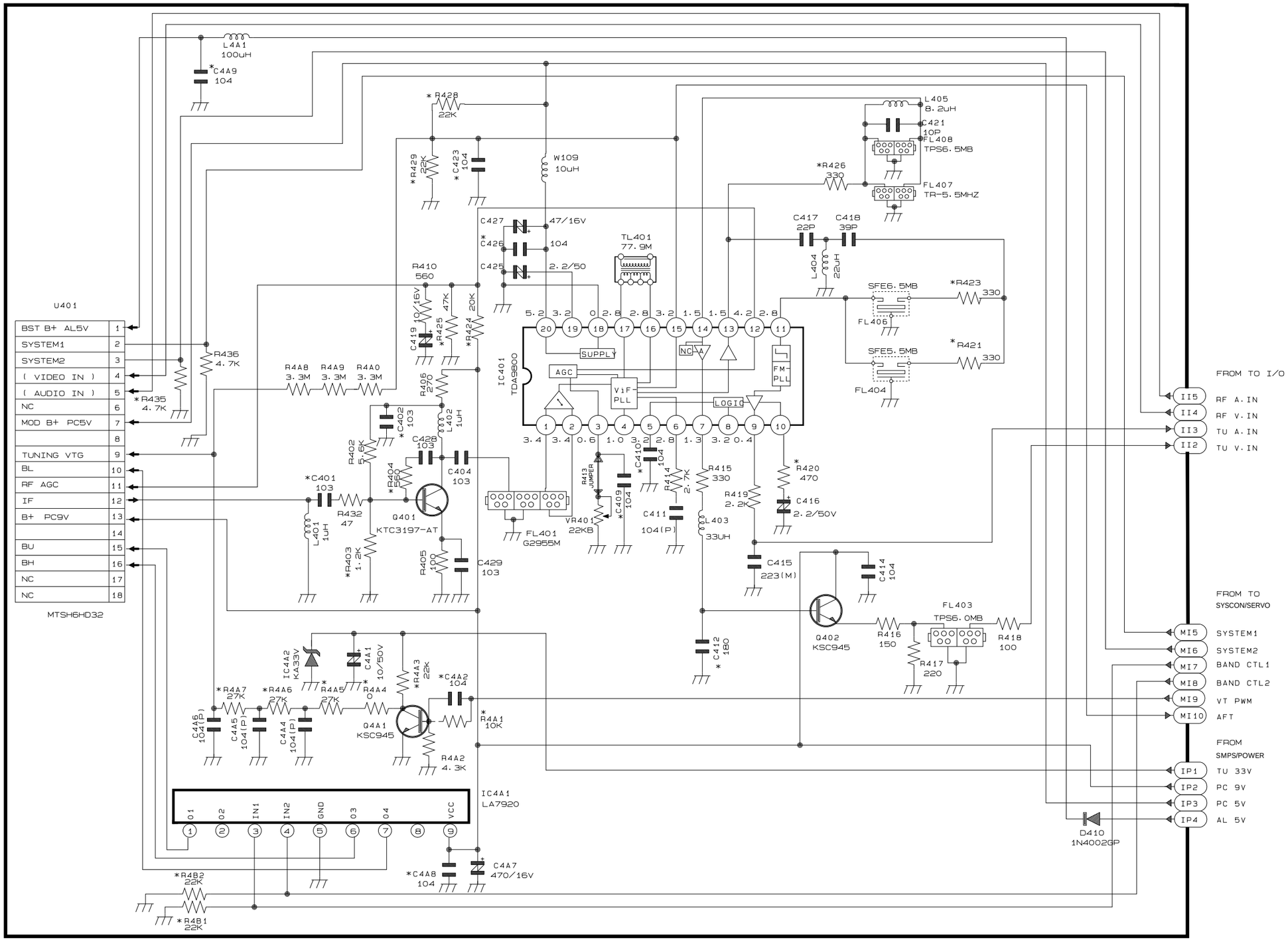


## 11-6 Audio/Video(4 Heads Multi)

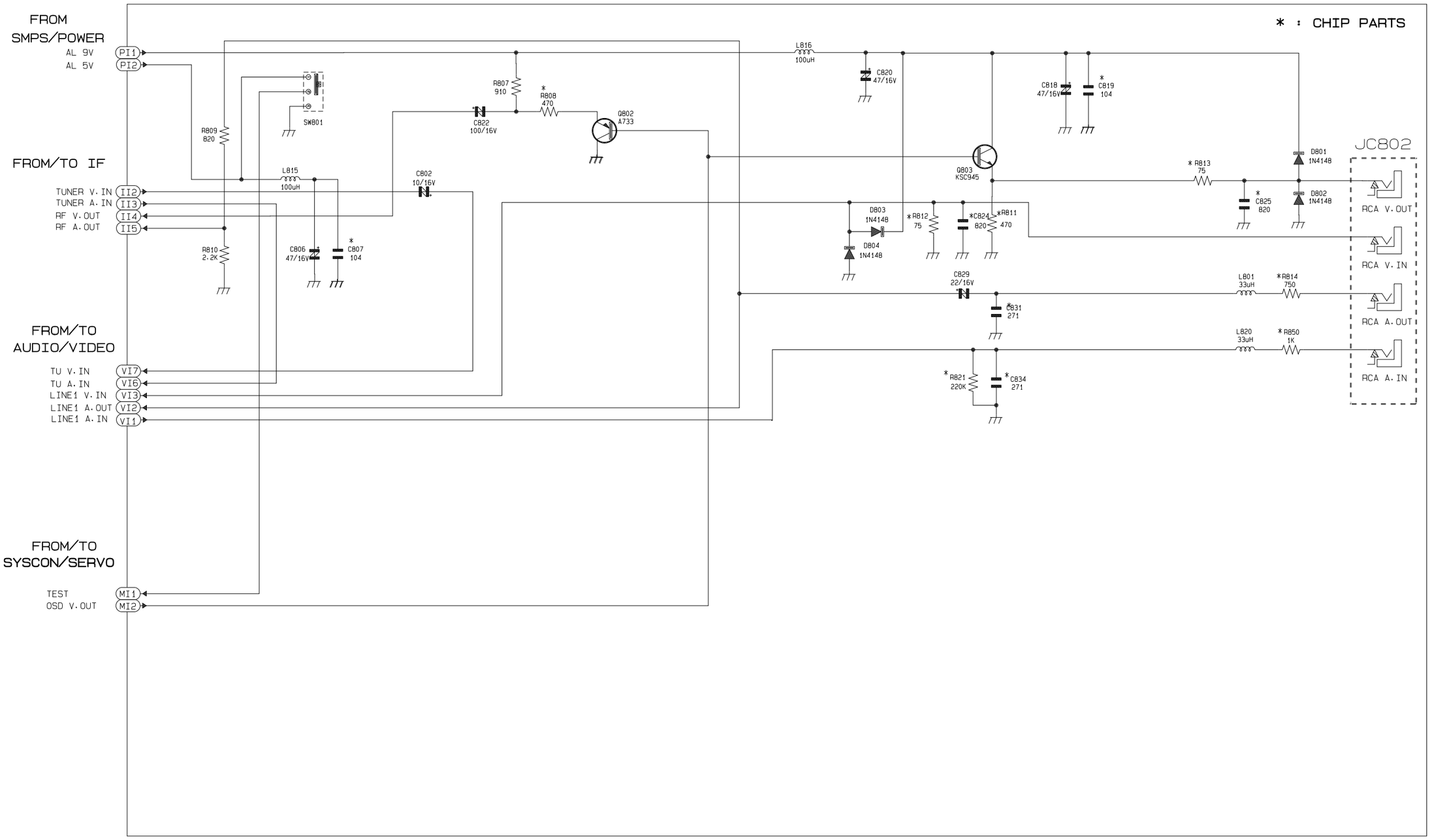
REC Y PROCESS
REC C PROCESS
PB Y PROCESS
PB C PROCESS
REC LINEAR AUDIO
PB LINEAR AUDIO



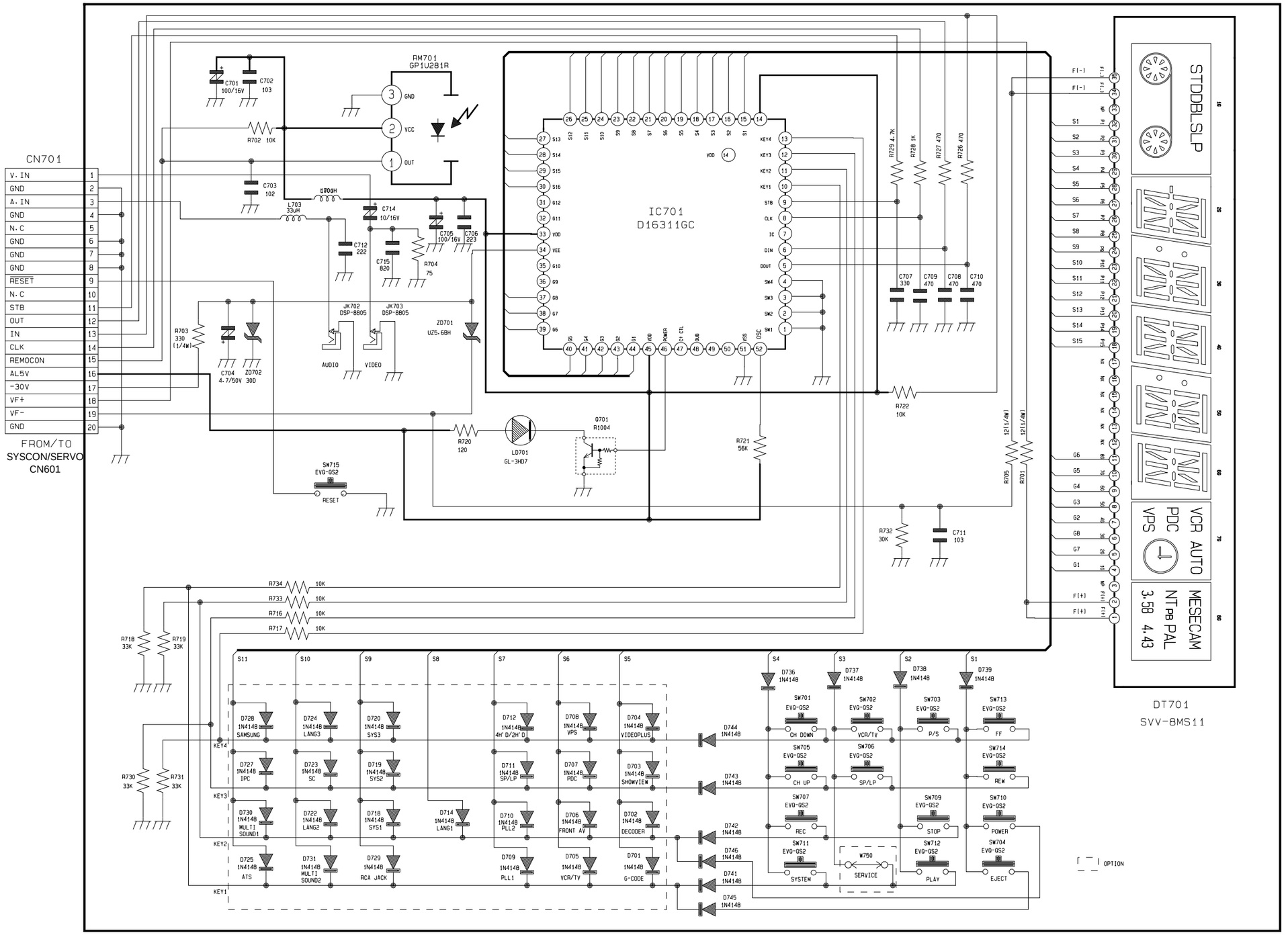
## 11-7 IF


U401
BST B+ AL5V 1
SYSTEM1 2
SYSTEM2 3
( VIDEO IN ) 4
( AUDIO IN ) 5
NC 6
MOD B+ PC5V 7
8
TUNING VTG 9
BL 10
RF AGC 11
IF 12
B+ PC9V 13
14
BU 15
BH 16
NC 17
NC 18
MTSH6HD32
L4A1 100uH
*C4A9 104
*R428 22K
*R429 22K
*C423 104
W109 10uH
L405 8.2uH
C421 10P
FL408 TPS6.5MB
*R426 330
FL407 TR-5.5MHZ
C427 47/16V
*C426 104
C425 2.2/50
TL401 77.9M
C417 22P
C418 39P
L404 22uH
SFE6.5MB
FL406
*R423 330
*R421 330
SFE5.5MB
FL404
R410 560
C419 10/16V
*R425 47K
*R424 20K
R436 4.7K
*R435 4.7K
R4A8 3.3M
R4A9 3.3M
R4A0 3.3M
R406 270
IC401 TDA9800
SUPPLY
AGC
VIF PLL
FM-PLL
LOGIC
NC
*C402 103
L402 1uH
R402 5.6K
C428 103
C404 103
*R404 560
*C401 103
R432 47
L401 1uH
*R403 1.2K
Q401 KTC3197-AT
R405 100
C429 103
FL401 G2955M
R413 JUMPER
VR401 22KB
*C409 104
*C410 104
R414 2.7K
C411 104(P)
R415 330
L403 33UH
*R420 470
C416 2.2/50V
R419 2.2K
C415 223(M)
C414 104
Q402 KSC945
FL403 TPS6.0MB
R416 150
R417 220
R418 100
*C412 180
IC4A2 KA33V
C4A1 10/50V
*R4A3 22K
*C4A2 104
*R4A7 27K
*R4A6 27K
*R4A5 27K
*R4A4 0
C4A6 104(P)
C4A5 104(P)
C4A4 104(P)
Q4A1 KSC945
*R4A1 10K
R4A2 4.3K
IC4A1 LA7920
O1 O2 IN1 IN2 GND O3 O4 VCC
*C4A8 104
C4A7 470/16V
*R4B2 22K
*R4B1 22K
D410 1N4002GP
FROM TO I/O
II5 RF A.IN
II4 RF V.IN
II3 TU A.IN
II2 TU V.IN
FROM TO SYSCON/SERVO
MI5 SYSTEM1
MI6 SYSTEM2
MI7 BAND CTL1
MI8 BAND CTL2
MI9 VT PWM
MI10 AFT
FROM SMPS/POWER
IP1 TU 33V
IP2 PC 9V
IP3 PC 5V
IP4 AL 5V

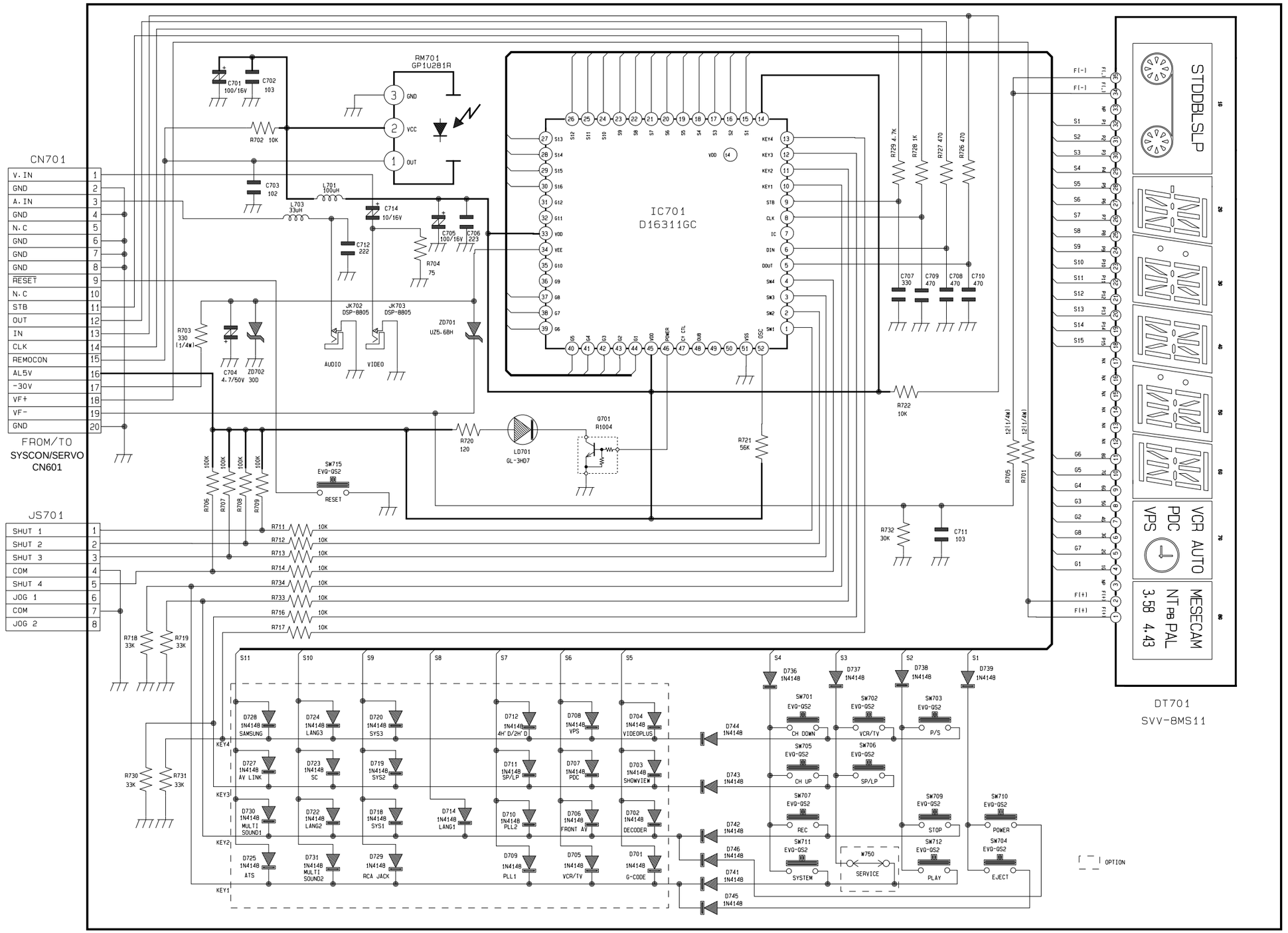
## 11-8 I/O


* : CHIP PARTS
FROM SMPS/POWER
AL 9V
AL 5V
PI1
PI2
FROM/TO IF
TUNER V. IN
TUNER A. IN
RF V. OUT
RF A. OUT
II2
II3
II4
II5
FROM/TO AUDIO/VIDEO
TU V. IN
TU A. IN
LINE1 V. IN
LINE1 A. OUT
LINE1 A. IN
VI7
VI6
VI3
VI2
VI1
FROM/TO SYSCON/SERVO
TEST
OSD V. OUT
MI1
MI2
SW801
R809 820
R807 910
*R808 470
C822 100/16V
Q802 A733
L815 100uH
C802 10/16V
C806 47/16V
*C807 104
R810 2.2K
L816 100uH
C820 47/16V
C818 47/16V
*C819 104
Q803 KSC945
D803 1N4148
D804 1N4148
*R812 75
*C824 820
*R811 470
C829 22/16V
*C831 271
*R821 220K
*C834 271
*R813 75
*C825 820
D801 1N4148
D802 1N4148
JC802
RCA V. OUT
RCA V. IN
L801 33uH
*R814 750
RCA A. OUT
L820 33uH
*R850 1K
RCA A. IN

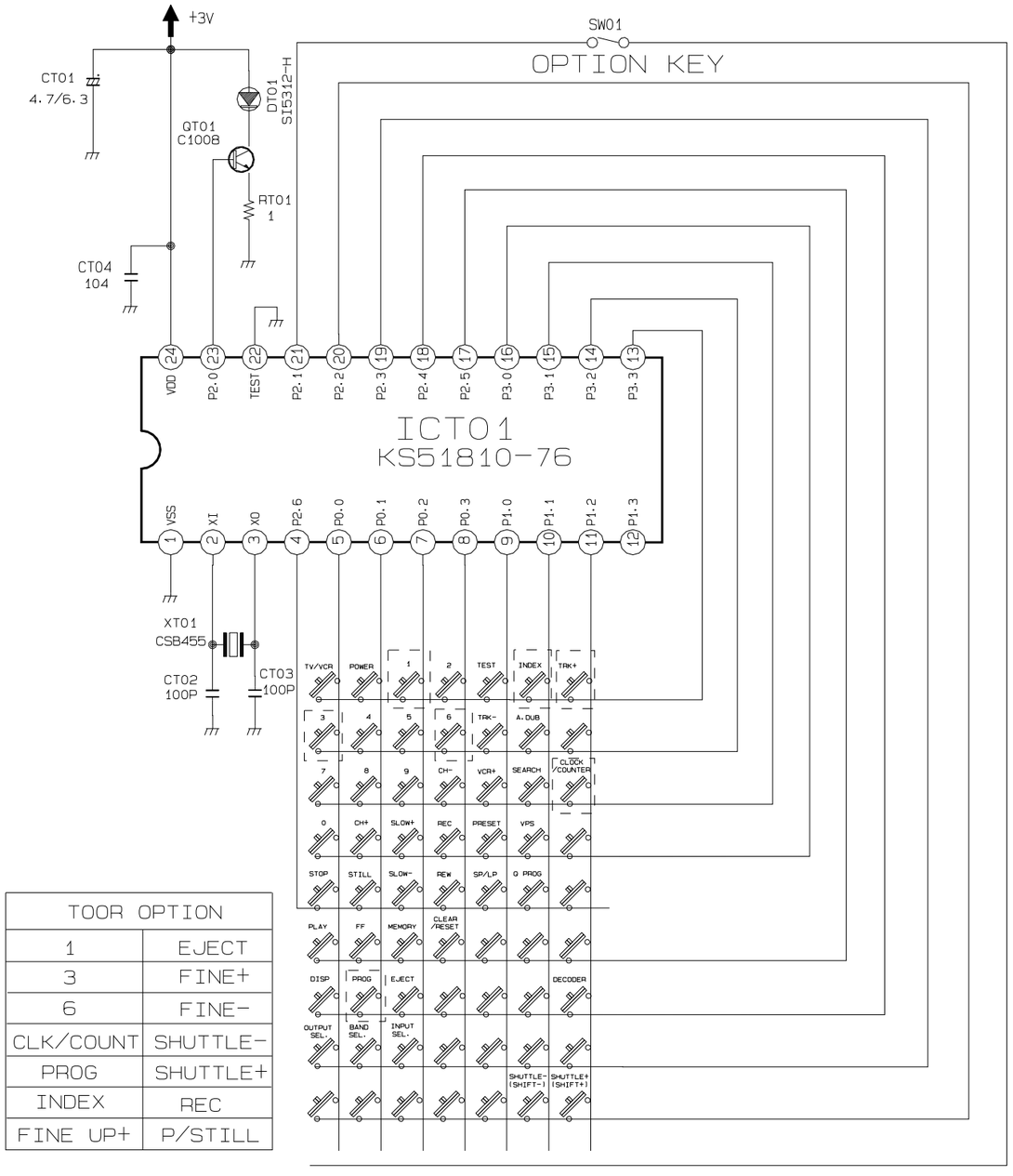
## 11-9 Function-Timer(SV-A20G/A30G/A60G/SVR-200/400)



# 11-10 Function-Timer (SV-A40G/A80G/SVR-205/405)



## 11-11 Remote-Control




| TOOR OPTION | |
|---|---|
| 1 | EJECT |
| 3 | FINE+ |
| 6 | FINE- |
| CLK/COUNT | SHUTTLE- |
| PROG | SHUTTLE+ |
| INDEX | REC |
| FINE UP+ | P/STILL |